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UNIVERSITY OF ALBERTA

FAMILY FUNCTIONING CHARACTERISTICS OF FAMILIES WITH EMOTIONALLY DISTURBED ADOLESCENTS

by
KENNETH Y.W. KWAN

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFULMENT OF THE REQUIREMENTS FOR THE DEGREE

OF
MASTER OF EDUCATION

IN
SPECIAL EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA
SPRING, 1987

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Supervisor

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External Examiner

Date April 10, 1987

TO MAYLEE...

MY DEAREST WIFE AND COLLEAGUE,

WE *DONE* IT !!!

ABSTRACT

Different types of adolescent psychopathology are believed to be associated with different types of family functioning characteristics. The Multivariate Profile Analysis and the Scheffe's Multiple Comparision were used to compare the Family Assessment Measure (FAM) scores of three different family groups. They included 30 families with adolescents who had no previous psychiatric records (Non-Clinical families), 15 families with adolescents who were identifed as having Internalizing behavior problems (Internalizing families) and 15 families with adolescents who were identified as having Externalizing behavior problems (Externalizing families), using the results of Child Behavior Checklist. According to the findings, there were significant differences between Non-Clinical, Internalizing and Externalizing families. The FAM scores showed that Externalizing families were at the dysfunctional level, whereas the Internalizing families and Non-Clinical families were functioning within the normative range. When comparing the FAM results between the Father, Mother and Adolescent groups, significant differences were found among the Non-Clinical families, using the Multivariate Profile Analysis and the Scheffe's Multiple Comparison. For Externalizing families significant differences were found only when Scheffe's Multiple Comparison was applied. No significant differences in either statistical analyses were found among the Internalizing families. The research findings were interpreted according to the level of family functioning that the FAM scores represent. The impact of the family world view and family interaction and coping styles on the FAM results was examined.

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I. INTRODUCTION

Significance of the Study

There is both theoretical and practical significance in studying the interrelationship between family functioning characteristics and adolescent psychopathology.

The family is a unique social organization. It is not merely a collection of individuals occupying a common physical and psychological space, but its members are all linked to and embedded in the family relationship. It has its own evolved set of rules, roles, power structure, form of communication, and problem solving style (Goldenberg and Goldenberg, 1980). There is no other group that is similar to the family in the context of membership formation, depth of the relationships, and nature of the organizational structure.

The familial relationship has significant impact on an individual's development. Minuchin (1974) sees the development of identity as largely dependent on the validation of an individual's self by a reference group, particularly the family. This is in contrast to the common belief that each person is an autonomous individual and is in total control of his or her own destiny. Bowen (1975) points out that "man is not as separate from his multigenerational past as he has fancied himself to be" (p.369).

As the basic social unit, the family is responsible for the caring of its members. Who can live with and provide care for an individual year after year? Who has the

depth of emotional commitment and energy of family members? How long will counsellors, mental health workers, and/or educators be able to keep individuals from their families by placing them in group homes, residential schools, and special treatment units? Who can create a substitute that would have the same impact as the family? Any dysfunctioning that affects one family member will affect other members and the unity of the family as a whole. Understanding of the way in which the family is functioning and its interrelationship with the individual member's dysfunctioning is crucial for effective intervention planning.

In the intervention process the family should be utilized as the major resource rather than treated as a hinderance in dealing with specific problems. Working with the family would not only be more cost effective than financing large institutions and programs, it would also be the key for individuals to achieve their optimal level of development and growth.

Research Questions

The major research questions are: How do families with emotionally disturbed adolescents differ from families with adolescents who have no psychiatric treatment record? Are there any differences between families who have adolescents with different types of psychopathology? If there are differences, what are the possible explanations?

II. REVIEW OF LITERATURE

The objectives of the review of literature are to clarify the basic theoretical concepts concerning the study of families, and to establish links between family relationship dynamics and adolescent psychopathology. Studying families is difficult because it is too close to the researcher's personal experience. Everyone comes from a family and has his or her notion of what a family is. The nature of the personal experience inevitably influences the way in which the family is understood and studied. The universal nature of the family and the connection of the family and the bio-social imperative are seemingly apparent. Many family researchers present their framework of the family as if it is self-evident.

In understanding the interrelationship between the family and adolescents psychopathology, several questions, from basic conceptual questions to specific ones concerning families with emotionally disturbed adolescents, need to be answered. For example, what is the unique nature of the family? How should it be defined? How are the family's unique characteristics and functions perceived? Why is the family so important to individual growth and development? What is the relationship between family relations and symptom formation? Finally, how does the understanding of family functioning dynamics relate to families with emotionally disturbed adolescents?

The literature review includes three sections. The first section attempts to define what a family is and to identify its characteristics and functions. The second section argues that an individual's psychopathology is the manifestation of the family's coping

style in a dysfunctional family. The third section seeks to explain the relationship between the family and individual psychopathology in families with emotionally disturbed adolescents.

1. The Family: Definitions, Characteristics and Functions

Defining the Family

Traditionally the term family referred to the nuclear family. In the past several decades, however, the structure and the function of the family have undergone many transformations. The liberalization in divorce legislation and the availability of various methods of contraception have changed the family composition. A family no longer necessarily implies a unit with two parents. When two persons are united through marriage, having children is no longer the inevitable consequence.

With the advance of technology and easy access to human services, functions that were traditionally carried out by the family are now shared with or taken over by other institutions and services, such as day care centers, school, social service agencies, hospitals, and television.

What is a family then? Why is it such a unique social unit? Why is it so important to human growth and development? Why is it so needed by all? Ransom (1983) asserts that "the family is not an entity or institution, but a type of relationship" (p. 100). The family is unique and significant because of the nature of the familial relationship.

The family is different from any other social group in its intense emotionally binding relationship. In the study of infant-parent bonding behavior, Bowlby (1969) believes that infants form their first social attachments at seven and eight months old.

Lamb (1976) found that infants exhibit attachment behavior to both mother and father at eight months.

Bonding is a reciprocal relationship. It is not surprising to find that the mother is preoccupied with the newborn baby, but such behavior is also found with fathers. Greenberg and Morris (1974) discovered that fathers begin to develop a bond to the infant by the first three days after birth and often earlier. This includes " a feeling of preoccupation, absorption and interest in their newborn" (p. 526).

Marital relationships also emphasize attachment and loyalty. Trotter (1986) suggested that "love" in marriage constitutes three dimensions, which are committment, intimacy, and passion. These are the key elements in creating interpersonal bonding.

Terkelsen (1980) defined family as

> a small social system made up of individuals related to each other by reason of strong reciprocal affection and loyalties, and compromising a permanent household that persists of years. Members enter through birth, adoption, or marriage and leave only through death. (p. 23)

With intense emotional ties, family members interact in a meaningful manner. Burgess (1969) calls the family a unit of "interacting persons" (p.29). It lives as long as interaction is taking place and dies when it stops.

A family, therefore is not a static organizational structure, but a dynamic emotional unit with a constant motion of interactions. Through these interactions the

family becomes the context that generates meaning for its members and defines the nature of the familial relationship (Handel, 1985). It is with this kind of intense interaction and the interconnection of the family that Ackerman (1984) argues that a family is:

> a household in which the behavior of any one person is at all times a function of behavior of all members. This means that change in behavior of any one person affects all the other people in a meaningful way. (p.16)

In essence, the family is a social system, whose members are tied by deep emotional bonds. Its members cannot but interact with each other. The family therefore becomes the social-psychological context that generates meaning for its members which in turn determines the nature of the relationships in the family.

Characteristics of the Family

A family has at least three notable ~~characteristics: 1) the~~ intense emotionally binding relationships, 2) the systemic organizational structure, 3) the stages of family developmental cycle.

The property that distinguishes the family from other social systems is the emotional bonding of the familial relationship. Unlike any other organizations, family membership is formed through formal commitment such as marriage, by adoption contract, or direct blood ties as by birth. The bonding is based primarily on affectional reasons. The membership, therefore, is permanent and can only be terminated by

death (Terkelsen 1980).

Rosenblatt (1977) defines committment as "an avowed or inferred intent of a person to maintain a relationship" (p.73-74) and Weiss (1975) refers to attachment as a "bonding to another that gives rise to feelings of at-homeness and ease when the other is present or if not actually present, perceived to be accessible" (p. 38). Although one may be both attached and committed to non-family groups or individuals, the depth would not be expected to be as great as within the family. Walters (1982) points out that "the qualities of committment and attachment may so affect family processes as to produce a quality in family groups that is not duplicated in other groups" (p. 847).

These emotional bonds go beyond physical and geographical boundaries. Though may be in the form of anger and bitterness or fond memories these bonds never be totally broken and forgotten. This emotional link can hold a family together even when the family is not functioning for some members and the relationships are destructive and hurtful.

The family is a social system. Goode (1956) sees the family as one type of "boundary-maintaining social unit" (p.3). Rodgers (1973) suggests that the family is a "semiclosed system" (p. 15).

Like other social systems, the family shares a common system characteristic. Reviewing the related literature in family system theories, Welsh (1982) identifies seven family system characteristics:

1) Circular causality: Each family member is interrelated, so that if there are any changes in one member it affects the whole system. Every action is also a reaction.

The causal link is circular rather than linear.

2) Nonsummativity: The total whole is greater than the sum of its parts. The family cannot be adequately described by summing up the total individual members' characteristics. As a system, the family manifests itself in terms of organization and interaction pattern which involves the interlocking of the behavior of its members. Therefore, to understand a family, the focus has to be on the gestalt of the whole pattern instead of individual components.

3) Equifinality: This refers to how the same origin of events may lead to different outcomes and the same outcome may result from different origins. Thus, the inital conditions or events will be outweighed by the impact of the family organization, including its ongoing interactional patterns and responses to stress.

4) Communication: All behaviors, including silence, are regarded as communicative in nature. Communication has two results, the first one being the exchange of information in relation to the content of the communication. The second result is to define the nature of relationship between the communicators.

5) Family rules: These are regulations for organizing the family interaction and maintaining a stable system by prescribing and limiting members' behavior. Such rules tend to be redundant and repetitious. They can be either explicit or implicit regulating various dimensions of family functioning, including role performance, hierarchy of power, boundary for inclusion and exclusion, and sanction and reward. They also reflect the values and norms within the family.

6) Homeostasis: This refers to a state of stability, maintained by a mutually

reinforcing feedback loop contributed by all family members such as in complementary or reciprocal behavior. In order to regulate tension and to restore the family equilibrium, the negative feedback process is used to counteract the deviation in the system.

7) Morphogenesis: This refers to a state of change and transformation. Developmental and situational demands require a family to change. The first-order change involves the individual adopting to the prescribed family rules and structure. The second-order change calls for the complete shift and transformation of the system to accommodate changes in the individual members. To induce the changes, a positive feedback loop amplifies the existing deviation, which leads to an eventual shift in the system.

Not only does the family have an organizational structure, it also undergoes changes and evolution toward increasing complexity (Minuchin, 1982). This developmental process is more or less the same for all families. They pass through the same sequence, marked by the similar critical transition point. For example, McGoldrick and Carter (1982) identified six stages of family development including the unattached young adult, the married couple, the family with young children, the family with adolescent, launching children and moving on, and the family in later life.

The developmental approach considers the family as a long-lived group with an ongoing history (Rodgers, 1973). The most obvious effects of time on the family unit are the physical and psychological maturation of the family members. This developmental process occurs not only in one family member or one generation within the family, but

in the entire family. The major concepts put forth by the family developmental approach are: 1) a family as a whole unit will go through a predictable cycle of stages, 2) the family will have continual change of role expectations, 3) family life perpetuates through a cycle of birth and death and 4) the family must undergo changes to deal with developmental tasks at each stage in order to ensure the effective functioning of the family and foster the growth of its members (Duvall, 1977; Carter and McGoldrick, 1980, 1982; Combrinck-Graham, 1985; Solomon, 1973; Rodgers, 1973).

Carter and McGoldrick (1982) state that the entire family emotional system is comprised of at least three generations of the family-- the younger, the middle, and the older generations. Hill (1970) describes the middle generation-- parents of married children-- as the "lineage bridge " between the older and younger generations of the family. According to Combrinck-Graham (1985), the family life cycle is not linear or unigenerational. It is a reciprocal complex as generational events occur or stack up on top of one another forming the family life spiral.

From a multi-generational pespective, Carter and McGoldrick (1980) believe that the impact of the family cycle includes two dimensions, the vertical and horizontal axes. Terkelsen (1980) calls these two dimensions the developmental interaction effects and the multigenerational transmission effects. The impact of the vertical dimension in the family system can be found in patterns of relating and functioning that are followed from generation to generation. The horizontal dimension in the family system accounts for the effects of time on the family unit.

Carter and McGoldrick (1980, 1982) view the family life cycle from an emotional

adjustment perspective. They suggest that there are underlying processes within the family life cycle which the family needs to negotiate. These include the "expansion, contraction, and realignment of relationship system to support the entry, exit and development of family members in a functional way" (1980, p.12). Therefore, developmental tasks for families are emotional tasks which need to be fulfilled by the family system at each phase of family life cycle. This is a complex emotional process requiring a second-order change, a major transformation in the family system (Terkelsen, 1980; Carter and McGoldrick, 1980; Combrinck-Graham, 1985; Walsh, 1983 and Solomon, 1973).

The conceptualization of the family developmental process is far from precise and conclusive. For example, the nuclear family is no longer the only form of family organization. Not all married couples have children; many may divorce and remarry. These stages, therefore, are far from complete. However, the developmental approach provides a conceptual framework to account for the effects of time and history in the understanding of the family as a social unit.

While describing the three main characteristics of the family namely, the unique emotional bonding between family members, the system organizational characteristics, and the developmental dynamics of the family, it is important to point out that none of these three characteristics can be considered in isolation. The existence of each characteristic modifies the nature of the others.

Defining the Meaning of "Function"

"Function" is one of the most commonly used terms in family literature. It is too

often taken for granted as self-explanatory. However, researchers do not always share a common meaning. Before the functions of the family can be identified, then, the term must be clearly defined.

Merton (1968) identifies at least four meanings that the term "function" implies. In the first meaning function refers to the specialized role of an individual. Secondly, function can also mean activities or tasks. Thirdly, function is a mathematical which indicates a particular relationship between two or more variables where the value of one variable depends on the value of the other. Fourthly, a more popular use of the term in the social sciences refers to the contribution of an item to the maintenance of the whole. While these different meanings are often interconnected, confusion arises when they are used interchangably without much clarification. For example, Walsh (1982) defines the term "functional" as

> a judgment about the utility of a structural or behavioral pattern in achieving objectives. It is contingent on the objectives and context: functional to what end, for whom, and in what situation. What may be functional at one level of analysis-- individual, family or society-- may not necessary be functional at the others. A functional pattern at one stage in the family life cycle may be dysfunctional at another phase. (p.6)

This definition refers to three different meanings of the term "functional": the ability to perform certain tasks, a consequence and interrelationship with other social

variables, as the contribution of the behavior pattern to the maintenance of the integrity of the family. Unless we are explicit in our use of this term, these meanings may not be clearly expressed.

In studying the family system, confusion also arises from the difficulty in defining the scope and range of the system boundary. The family is both a subsystem of a larger social system as well as a system on its own. At the macro level, the focus is on the relationship between the family and the larger society. This is the societal-institutional facet of family dynamics. At the middle range level, the family is viewed as a social system in itself. The emphasis is on how the family meets its functional requirements for survival. This is the group-interaction facet. At the micro-level the family is perceived as a human group made up of individuals where the interrelationship between the family and the individual is the primary concern. This is the individual-psychological facet (McIntyre, 1966; Rodgers, 1973).

It is important to specify the level of enquiry, as Welsh points out that what is functional at one level may not be functional at another level. Since the present study is concerned primarily with the interrelationship between the family and individuals, this will be the focus of discussion.

Functions of the Family

At the micro-level, the primary function of the family is to provide a context that supports needs attainment for all its members. Based on his clinical experiences with families, Terkelsen (1980) makes three observations:

1. All family units promote member-to-member interactions that are suffused with

attachment behavior in its various forms.

2. These interactions continue over whole lifetimes.

3. The outcome of these interactions is physical survival and personal development for all members.

He concludes that the purpose of the family "is to evoke between members sequences of affectional interaction sustained over a lifetime, thereby producing survival and development for all members" (p.26).

Epstein, Bishop and Baldwin (1982) state that the primary function of the family is to support the development of its members. In carrying this out, all families must deal with basic tasks which deal with the continued survival of the family, developmental tasks which are related to needs for individual growth at different stages of the family life cycle, and hazardous tasks which emerge from accidental situations.

Skinner, Steinhauer and Santa-Barbara (1983) suggest that the survival and growth of the family is dependent on whether its members share and fulfill common goals and objectives. The most important function for the family is to provide for the development as well as maintenance and nurture of its members. To meet these goals, the family must execute certain basic functions effectively.

Skinner, Steinhauer and Santa-Barbara (1983) developed the Process Model of Family Functioning (see Figure 1). According to this model, there are seven major dimensions of family functioning from the most observable to the most abstract, including Task Accomplishment, Role Performance, Communication, Affective Expression, Affective Involvement, Control, and Values and Norms. These dimensions

are interrelated, each complementing the other for effective family functioning.

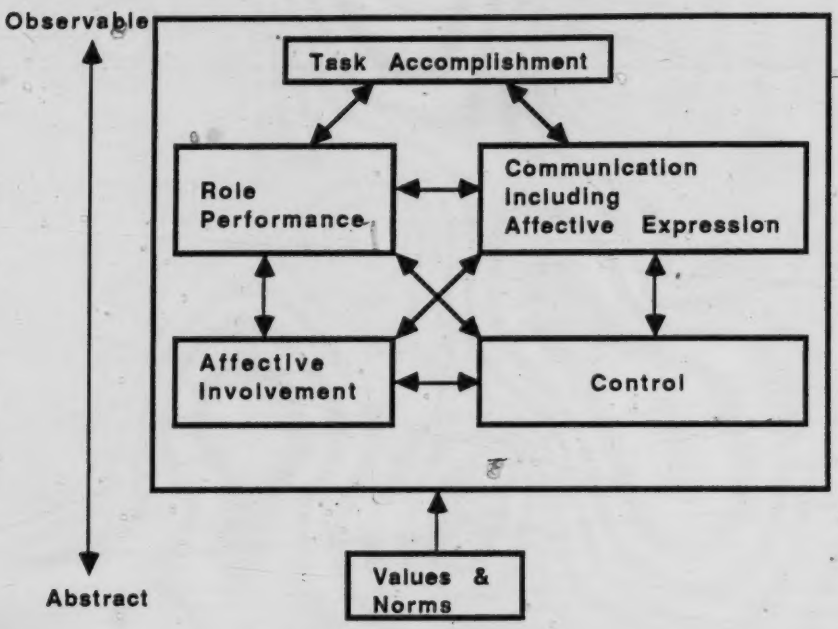

Figure 1. The Process Model of Family Functioning (From "The process model of family functioning" by P. D. Steinhauer, et al. In Can. J. of Psychiatry, March 1984, 29 (2), 78.)

Task Accomplishment is the superordinate goal of family functioning. It is through these tasks that the family meets its members' needs. The nature and the priority of the family task, however, is defined by the family's own Values and Norms. Some of these values and norms are from the family of origin and have been internalized by individual members. Some are the result of the shared history and experience as a nuclear family unit; others are the effects of social and cultural influences.

To accomplish these tasks, every family member has to fulfill a variety of roles. Successful Role Performance demands effective communication between family

members. Communication, however, cannot be solely task oriented, but needs to be concerned with emotional needs. Affective Expression focuses on the communication of feelings which can either impede or facilitate Task Accomplishment and Role Performance. Similarly, members' Affective Involvement with each other and Control, their way of mutual influence, may either help or hinder the family's Task Accomplishment.

While it is easy to make a list of obvious activities which the family must fulfill to ensure its survival, Merton(1968) warns us that not all social functions are explicit and obvious. He calls "those objective consequences for a specified unit which contribute to its adjustment or adaptation and were so intended" as manifest functions and "[the] unintended and unrecognized consequences of the order" (p. 117) as latent functions.

To uncover and understand the latent or covert family functioning requires careful observation. The basic characteristics of the family must be considered in the process of the investigation. These include the uniqueness of family emotional bonds, the systemic nature of the family organization, and the process of the family development cycle.

2. Individual Psychopathology and Family Functioning

The family approach does not ignore the impact of other factors such as biological predisposition, social-cultural strains, or political and economical pressure. The family approach recognizes the contribution of these factors, but it acknowleges the notion that humans do not exist in a social vacuum. Everyone is embedded in

relationships and the familial relationship is the primary one. The emphasis, therefore, is on how the family functions as a whole in dealing with these external and internal challenges and the consequence of such coping strategies. Individual psychopathology can be seen as 1) a symptom of family dysfunctioning and 2) the consequence of ineffective coping strategies.

Psychopathology as Symptom

Many family theorists perceive individual psychopathology as a symptom indicating that the family no longer functions effectively to accomodate changes and demands in meeting the needs of its members. (Carter and McGoldrick, 1980,1982; Combrinck-Graham, 1985; Haley 1973 and Terkelsen, 1980). The family may be unable to deal with the developmental stress and/or to resolve different intergenerational issues that emerge in various stages of the family life cycle.

Minuchin (1981) suggests that the individual family member who is seen as pathological is not the problem. The locus of pathology is in the rigidity of the family's transactional patterns in coping with stress and demand for changes. The solutions attempted by these families are stereotyped repetitions of ineffective responses. They can only generate heightened affect without producing any actual changes. Such patterns limit these families' abilities to solve problems effectively.

Minuchin perceives the "healthy" family as one that has definite power hierarchies and clear interactional boundaries. He argues that the rigid interaction pattern is the result of the dysfunctional family's organizational structure. Following Minuchin's formulation, Umbarger (1983) identifies three areas of dysfunctional family

structures: 1) family subsystem boundaries, 2) alliances and triangulation, and 3) generational hierarchies.

Family subsystem boundaries. The system boundaries are rules which define who participates and how. The boundaries regulate the interaction between the family and the outside system and the subsystems within including parental, spouse, and sibling subsystems (Minuchin, 1974). Problems arise when the boundaries become too rigid or too weak. Individual family members either have great difficulty gaining access to other members or making of their choices. They have little personal identity. Minuchin (1974) identifies two types of boundary dysfunctions, the enmeshed family system and the disengaged family system.

In the enmeshed family system family members are extremely sensitive to each other. The behavior of one member immediately draws responses from the other members. Therefore little independence is tolerated. The disengaged family is characterized by extreme interpersonal distance in the family. Individuals expect little support and nurture from each other.

Alliances and triangulation. Both triangulation and alliances are a pattern of splits and alignments among family members. Problematic alliance and triangulation are an indication of ineffective conflict resolution in the family. Instead of directly confronting the issues and resolving them, each of the family members rally support from other members. Another way to detour conflicts is for the two members to project their disagreement on the third member while maintaining their superficial alliance.

Generational hierarchies. The family is composed of two distinctive levels, the

executives being the parents and the dependents being the children. Effective family functioning requires appropriate maintenance of power hierarchies so that parents can carry out the leadership role and the children can be parented. The pathological form of hierarchies indicates confusion of power structure in the family. For example, the child may become the caretaker while the adult is helpless and passive. It is a reversal of roles.

The identified patient, however, is not the only family member who is experiencing difficulties. Terkelsen (1980) points out that the relationship between symptoms and dysfunction is in the nature of a feedback loop. He gives the following illustration of how the individual pathology would affect the family structure:

> A family member in a dysphoric state (let us call him the index member) cannot remain reciprocally related to other members. His behavior is keyed to relief of his own dysphoria, and not to their needs. As important needs of these others (the target members) go unmet, they too begin to experience dysphoria. As they seek to dissipate their own distress, they diminish their efforts to maintain reciprocity with the index member. Thus, symptom evokes dyfunction (in target members), and so on. (p.45)

Like a chain reaction this process spreads into the vulnerable elements of the family structure. The original disruption is repeated in kind, and the dysfunction affects even peripheral members. If no changes are made in the family, these loops and their

secondary elaborations will grievously disrupt the family's capacity to meet the needs of any of its members. Gradually the dysfunctional transaction integrates into the family's ongoing structure. The family becomes dysfunctional for all its members.

McCord (1979) and West and Farrington (1973) found that marital conflict in families with antisocial children is more prevalent than in families with normal children. Yager (1981) reviewed the research literature on Anorexia Nervosa and reported that many parents of anorexics also suffered psychosomatic and emotional disturbance. Aarkrog (1985) surveyed 100 psychotic and borderline adolescents and their parents, where 48% had one or both parents with previous or current psychiatric disorder; 33% had biological parents who were divorced, and 34% came from single parent families.

Rutter and Quinton (1984) conducted a study to examine the effects of parental psychiatric disorder on children in Britain. In the four year period of their study, they found these families had a higher rate of disorder among the spouses and a higher level of family discord between parents. The children from these homes had an increased rate of persistent emotional and behavior disturbance.

However, it is not inevitable that all the children of psychiatric patients will suffer mental disorder. Rutter and Quinton's (1984) research data showed that one third suffered no emotional and behavioral problems, and one third had only transient psychiatric problems during their 4-year follow up period. Rutter and Quinton argue that the psychiatric risk for the children does not stem from the mental disorder of the parents. The chief mediating variable is the exposure of these children to family discord and hostility.

Psychopathology as Coping Strategies

The function of individual psychopathology to the family must be understood in connection with the basic family characteristics and family functions. Family members, tied by intensive emotional bonds, inevitably go through time with each other and form a collective organizational structure. Regardless of the functioning level, individual family members have no choice but to interact with each other. They have no choice but to meet the challenge of development and changes as a unit.

Individual psychopathology can be understood as a strategy in which the family attempts to cope with changes and demands as a unit. However painful, unsettling, or destructive as it may seem, it is still a solution in itself (Hoffman, 1981, Haley, 1970; and Watzlawick, Weakland, and Fisch, 1974). Individual disruptive behavior serves a function in the process of maintaining the family. From this perspective, then, individual psychopatholgy carries at least two functions: 1) maintaining the unity of the system, 2) motivation for changes.

Maintaining the unity of the system. Individual distress may function as a homeostatic regulator, restoring family functions and deflecting the needs for changes in the family (Haley,1970; Walsh, 1982;). Papp (1981) calls it a "mechanism for self-regulation". It regulates the family system in three ways, namely to maintain the balance, to generate cohesion, and to mediate conflict.

The maintenance of balance can be demonstrated in an example case of a dominant wife, and a passive and depressive husband. As the wife becomes increasingly overtly aggressive, the husband withdraws and becomes depressed. The

wife experiences total helplessness in coping with the husband's withdrawal and depression and retreats from her aggressiveness, the result being that the husband gains some status in the relationship. He becomes more verbal and assertive and triggers the wife's hostile responds. Thus the husband's depression is a mechanism for maintaining the balance in the relationship. Minuchin (1964) found this kind of relationship in the families of delinquents. The child's delinquent behavior regulates the distance of parental involvement. Hoffman (1981) calls it a "Homeostatic Seesaw" regulated by an implicit limit of homeostatic plateaus.

Durkheim (1951) sees the main function of deviance as promoting group cohesion. The system reacts to the existence of deviance by forming a united front and highlighting its rules and norms. The acting out behavior of a child may be perceived by the parents as a threat to the family and they join together to deal with the child.

The mediation process is a "rescue operation" (Jackson, Hoffman, 1981). It serves to divert the existing conflicts. Bell and Vogal (1985) found that parents of emotionally disturbed children are often in serious conflict. By uniting in their common concern of the child, they are able to suppress their hostility towards each other and maintain a superficial harmony.

Motivation for changes. Minuchin (1974) calls the dysfunctional family "a system that has responded to the internal or external demands for changes by stereotyping functioning" (p.110). Dysfunctional families are caught in a rigid repetitive family structure that allows only a narrow range of behaviors for change. Individual disorder provokes a crisis in a family. A Crisis generates acute pain and discomfort that

motivates the system to change.

In his studies, Patterson (1982) found that families with antisocial children did not confront each other and resolve their problems, despite a high frequency of conflicts. The parents made many threats but did not follow through. He suggested that, due to fear, these families tended to avoid the pain that would result from confrontation. This created more difficulties in negotiating change. The only other way that these families could act was when crisis situations arose. Crises and conflicts therefore became processes for problem solving strategies.

Comparing 50 normal and 50 distressed couples, Birchler and Webb (1977) found that the distressed couple had a mean of 3.4 conflicts per week in contrast to the mean of 1.0 for the nondistressed couple. Quinton (1980) noted that distressed families had twice as many unresolved conflicts and crises as did the matched control group. Leveton (1984) believes that much of the crisis in adolescence is a negotiation process between the family and the adolescent in their need for autonomy and dependency.

Crisis is not a negative element for the growth of the family. According to Erikson (1968), it is "a turning point, a crucial period of increased vulnerability and heightened potential" (p. 96). Hague (1984) sees conflict as an important motivator for reorganization and transformation. The emerging symptomatic behavior gives the family an opportunity to gain new information and evolve to a new structure.

What is different for some of the more problematic families is that they remain in a rigid family functioning pattern unless there is outside intervention. Provoking crisis and conflict is just one of the regular problem solving patterns. When responding to

internal and external demands, these families still react in vicious circles of repetition and ineffective transactions. These reponses do not generate sufficient change to transform the family structure which would facilitate optimal growth and development (Hoffman 1981).

Individual Psychopathology and Family Types

If individual psychopathology is related to family coping strategies, then different psychopathology types can be associated with different family functioning types. The interrelationship between individual psychopathogy and family dysfunctioning can, therefore, be further demonstrated by studies of family typology. One way to study and compare differences between types of families is according to the kinds of symptoms that individual family members exhibit.

A research team including Minunchin, Montalvo, Guerney, Roseman, and Schumer (1967) conducted a major study on families of slums. These were poor, disadvantaged, unstable families with delinquent adolescents. They found six characteristics in the family structure: 1) these families were largely one parent families, with the mother as the household head and a constant change of the peripheral male figure, 2) with intact families, the marital relationships were poor, spouses functioning mostly as parents of their child instead of as husband and wife, 3) there was confusion in the family hierarchy where no clear executive power was established, 4) the parents relinquished their executive functions, 5) there was role reversal where the siblings took on major roles as the socialization agents, and 6) there was a break down of communication and dysfunctional alliance in the family.

In reviewing related literature, Hoffman (1981) found that families that have members with psychotic or psychoneurotic symptoms are likely to have the following characteristics:

> 1) a high degree of family connectedness; 2) covert coalitions which cross generation lines; 3) closeness and distance between family members determined by rules for congruence of coalitions; 4) third parties interfering with or deflecting conflict or closeness between pairs; and 5) relationship with a high intensity factor. (p. 137)

Another way to classify families is to identify them according to the organizational structure of families. The focus is to categorize the types of family features in relation to individual family member's psychopathology. These models provide useful conceptual frameworks to investigate the interrelationship of family characteristics and psychopathology.

One of these models is Beavers' (1977) family system model, which is based upon his involvement in the research of healthy families and his clinical experience with dysfunctional families. This model consists of two dimensions, whereby the structure, flexibility, and competence of a family and its members scored on one dimension and family functioning styles scored on the other. There are nine family types.

The horizontal axis relates to the structure, adaptive flexibility and types of

interaction within the family unit. There are totally five levels: Optimal family, Adequate family, Midrange family, Borderline family, Severely Disturbed family.

The vertical axis has two dimensions, the centripetal and the centrifugal, which relate to a stylistic quality of family interaction. Centripetal refers to the tendency of an inward movment toward the center. Families similiar to this stylistic type tend to view most relationship satisfactions as coming from within the family rather than from the outside world. and centrifugal implies tendency of moving outward or away from the center. Families similar to this stylistic type tend see the outside world as holding the most promise of satisfaction and the family as holding the least.

The family interaction style dimensions are curvilinear in which either extreme centrifugal or centripetal styles are associated with poor family functioning. As a family becomes more capable and more adaptive, excessive centripetal or centrifugal styles diminish. Competent families can change and adapt in either way to meet the needs of its members.

In this model Beavers linked individual psychpathology types with family interaction style. Depending on the level of family functioning, the centrifugal types are associated with acting out types of pathology, including behavior disorder, borderline personality disorder and sociopath and the centripetal types are associated with inhibited types of psychopathology, including neurotic, severely obsessive and schizophrenic in the offspring in these families.

Olson and his colleagues (1979, 1983) developed a "Circumplex Model" of the family system. There are sixteen family types which derive from two conceptual

dimensions, which are Family Cohesion and Family Adaptability. There are three levels of family functioning including extreme, midrange and balance. Family Cohesion refers to the connectedness of the family and Family Adaptability is the ability of the family to change.

Using the Circumplex Model, a number of studies have been done to determine the type of family functioning in different populations. Russell (1979) examined 31 families with female adolescents divided according to level of functioning and found that high functioning families were more balanced on both dimensions and the low functioning families had extreme scores; all low functioning families fall into the extreme types while ten of the fifteen high functioning families fall into the balance types.

Portner (1980) studied 55 families in family therapy and 117 non-clinical families. The results indicated that non-clinical families were more likely to fall in the balance areas in which 58% and 42% were in the cohesion and adaptability dimensions, respectively. However, 12% of these families scored in the extreme range. In contrast, 30% of the clinical families were classified as "chaotic disengaged" according to their scores.

Bell and Bell (1982), surveyed 33 families with runaways and 117 nonproblem families. They found that for the runaway families, 29% were "disengaged" and 23% were "chaotic"; and for the nonproblem families 7% were "disengaged" and 7% were "chaotic".

A third method of studying family types is to identify the performance of families

on certain basic tasks which are fundamental to the survival and development of the family.

Lewis, Beavers, Gossett and Philips (1976) conducted a study on how families function. They compared 33 healthy families, 7 neurotic families, 45 behavior disorder families, 18 psychotic families. Eight variables were used: 1) affiliative versus oppositional attitudes; 2) respect for one's own and others' subjective world view versus disregard for the unique in one's self and other; 3) openness and directness versus distancing, obscuring, or confusing interaction; 4) a firm parental coalition with no evident competing parent-child coalition versus a tattered parental coalition; 5) an understanding of varied human motivations and needs versus a rigid, control orientation; 6) spontaneity of interaction versus the repetitive and stereotyped; 7) active-constructive versus passivity; and 8) unique, impressive individual characteristics verus bland qualities.

The optimal families scored well in most of the eight categories, but adequate families scored low in all categories except active-constructive. It is apparent from their study that families can function with the presence of a good deal of stereotyped behavior, limited skills and obliviousness.

The research results indicated that there were few single variables correlated at statistically significant levels, although there was a consistent pattern of correlation of sums of variables. Lewis et al (1976) argue that what differentiates the optimally functioning families and the dysfunctional families is not by a single quality, but by the presence and interrelationship of a number of variables.

Predictibility of these family typologies has not been totally successful. For example, when Olsen et al (1983) conducted a large scale, nation wide survey of 1140 non-problematic families, they found that some of these families also had extreme results which may have suggested dysfunctional familial relations except that no apparent dysfunctioning was observed. Oliveri and Reiss (1982) also found types of problem solving styles among non-problematic families which resembled dysfunctional familial relationships. However, they found that these families were well adjusted. Therefore, they state that while it is important to study the nature of family functioning one must be cautious in its application when making judgement of what exactly is unhealthy or which are maladaptive families. Haley (1978) argues that the descriptions of family interaction are offered for the purpose of providing a framework and a point of reference for planning intervention and understanding these families. It is not a model of what a normal family should be. The existence of patterns of interaction that are usually observed in problematic families cannot be assumed to be dysfunctional in a family.

Some researchers argue that there may be qualitative differences between functional and dysfunctional families but not on single dimensions. At the conclusion of their research of family functioning, Lewis et al (1976) assert that "health at the level of family was not as a single thread, and that competence must be considered as a tapestry, reflecting differences in degrees along many dimensions" (p. 206). What is important in studying the various family characteristics is that the researchers see these models as descriptions of how the troubled families function rather than

explanations of why theys become pathological.

3. Families with Emotionally Disturbed Adolescents

Although family models are far from complete and precise, they do provide a broader conceptual framework in understanding individual behavior. From the family system perspective, emotional problems in adolescents are related to at least two family factors, the interaction effects of individual family members' developmental challenges and the family's coping style at this stage of family development.

The challenge of adolescent years

Olsen et al (1982) state that "no stage of the family life cycle seems to be more stressful than the adolescent phase" (p. 342). Historically this period has been viewed as a time of storm and stress (Rappopart et al,1976; Sebald, 1977). Erikson (1968) calls adolescence a crisis period. During this time adolescents experience physiological and cognitive changes.

The most obvious changes for the adolecents are the physiological, including the growth in size, change in voice, growth of body hair, different body shape, and other outward manifestations of growing reproductive capacity. All these changes symbolize the end of childhood and transission to adulthood.

They are no longer sexually neutral, and now have sexual appeal. The body becomes an important symbol in which adolescents invest emotions of security, self-worth, and competence (Roger, 1985). Damon and Hart (1982) point out that self image is largely physical in childhood but gradually becomes more psychological in adolescents.

During the adolescent period there is also an observable cognitive shift. Piaget (1958) refers to the change of cognitive processes in adolescents as the development of the formal operational stage in which adolescents are able to use symbols in their thinking. They can reflect on the problem and consider the different aspects relating to the problem. They are able to look at the problem from another person's perspective and can take the role of others to examine the problem. Thus adolescents can now deal with abstract, propositional problems and may consider other possibilities and ideals which younger children either ignore and/or are incapable of formulating.

These changes give adolescents expansion and freedom in their thought processes. The adolescents may now possess better understanding of their life situation, and can have much more input and ability to control the direction of their life. There are at least two implications as the consequence of the new cognitive shift. First of all, because of their capacities in abstract reasoning, adolescents are more likely to challenge many of the family rules, traditions, and viewpoints given by the parents.

Secondly, younger children tend to imitate their parents' ideas as if they were their own. Similarity in thought and behavior creates a symbiotic relationship which is reinforcing to the parent as the behavior of the child is seen as the reflection of parenting skills. The growing independence in thought and opinion in adolescents pulls them away from this symbiotic attachment and adds more stress in the parent-adolescent relationship (Miller and Myers-Walls, 1983).

With these changes, adolescents face new issues in their life. These can be summed up in three major themes (Hopkins, 1983):

1) Searching for an identity: Identity is defined as the nature of one's self and one's role in the world at large. Adolescence is the stage of the life cycle when one confronts psychological issues and seeks their identities in a cultural context.

2) Establishing Autonomy: Autonomy does not imply just a physical separation, but is largely a gaining of psychological independence particularly from the parents. Autonomy is one aspect of adult status, in which an individual can have freedom of choice without relying on parental approval.

3) Decision-making about life goals: Most young people make important decisions about their life goals, especially in terms of occupational goals. Erikson (1964) believes that occupational decision-making is the crux of the identity issue.

Erikson (1964, 1965) believes the crisis for adolescents is in the forming of their own identity. It is a process which includes achieving a sense of individual uniqueness, striving for continuity of experience and forming a solidarity with a group ideal. He sees that development as a series of progressive stages where the successful resolution of identity depends on how the individual has resolved issues in the previous stages. Moreover the successful achievement of identity will have an important impact on the adolescent's future development.

Marcia (1980) points out that attainment of identity requires a committment as well as a delay in making a specific commitment so that individuals can explore different roles both in reality and fantasy, until a rational choice can be made.

The challenge for adolescents then is to achieve autonomy so that they can form their own identity and learn to make independent decisions. Douvan and Adelson

(1969) suggest that there are three goals guiding the adolescent's search for mature independence: behavioral autonomy, emotional autonomy, and value autonomy.

Behavioral autonomy occurs as the youth becomes more involved in activities outside the home and takes a more independent stance within the home. Emotional autonomy suggests the need for adolescents to relinquish or at least alter the close emotional bonds to parents that have grown in strength since infancy. This does not imply rejection of the parent-child relationship but a change in the nature of the relationship. Value autonomy occurs when individuals grapple with issues of educational and occupational goals and questions related to the establishment of their own family and relationships (Garbarino, p. 267).

The key to successful identity formation is a result of two seemingly opposite forces, the strong sense of belonging and strong differentiation in the family. On one hand, only with a strong sense of belonging, are individuals able to internalize a clear definition of self as the foundation for identity formation and only with secure bonding do individuals dare to contradict the family tradition. On the other hand, only through independence can individuals explore many alternatives and develop a clear notion of self. The developmental challenge for the adolescent is to be able to achieve autonomy and at the same time maintain closeness to the family.

The Mid-life Challenges of the Parents

During the period of family with adolescent, parents are also in transition as they face their mid-life challenges. Levinson et al (1978) stated that adulthood is a cycle of relatively stable periods of approximately seven years followed by a period of transition

which lasts about five years. They identify the years of 28 to 33, 40 to 45, and 60 to 65 as years of adult transition. These periods are often marked with turmoil, uncertainty, and resurfacing of earlier unresolved business.

The challenge for parents in their mid-life is generactivity (Erickson, 1964). It is characterized with concern about what they have generated, achieved, and produced. It is the time for them to re-assess their accomplishments in terms of their desires and expectations. It is also the time they begin to realize that they have come to the peak of their careers and learning power. Looking at the result of their life experiences they may come to question their own values. The demands of this period on individuals are so intense that some theorists have described this period as "mid-life crisis" (Gould, 1972; and Levinson, 1978).

McArthur (1962) suggests that much of the parent-adolescent conflict can be explained as a result of direct opposition of developmental tasks between adolescents and their middle aged parents. Steinberg (1985) finds three areas of developmental concerns of parents and adolescents which are "ironically complementary" (p. 135).

The first one is concerned with the issue of biological changes. While the teenager is in the prime of physical health and attractiveness, the parents are facing their decline. Gould (1972) found that individual's concern with health increases markedly at age 35. Neugerten (1975) found that there is a major shift in time perspective at mid-life. To adolescents, the future is ahead of them and there is time for them to explore. In contrast, the parents begin to feel their time is limited.

Another issue is related to power, status, and entrance into the role of adulthood.

Adolescents are on the edge of adulthood and their potential seems unlimited. The parents, however, have made their choice and their course seems set. Some may have already reached their productive plateau and the end of the upward mobility ladder. They have to deal with the gap between their initial aspirations and their actual achievement. The parents also begin to recognize their own mortality, weight-gain, and the loss of sex appeal. Most parents may have been married for fifteen to twenty years. The marital relationship is in gradual decline in sexual satisfaction, demonstration of affection, communication, and common interests.

During this period parents also experience increasing family obligations. Not only do they need to raise their own children but must nurture their spouse relationship. There is a drop in marital satisfaction during their children's adolescent years (Olson, 1983). The parents may need to take care of their aging parents, and deal with their retirement and eventual death. Parents of adolescents are also in a developmental crisis.

The Challenge of Families with Adolescents

The stress of transition comes from confusion and isolation which accompanies the breakdown of old expectations and values. Rules and practices which were once accepted are now being challenged. Roles and positions undergo reallocation. With two generational transitions existing together, it is difficult to avoid one feeding the other, adding to the already stressful situation.

Carter and McGoldrick (1980) state that the key principle for the negotiation of transition in this period is "increasing flexibility of family boundaries to include

children's independence" (p. 17). Everett (1976) points out the major developmental tasks for the family are 1) the development of increasing autonomy for adolescents, 2) the refocusing on mid-life marital and career issues, and 3) the shift toward caring for the older generation.

No doubt adolescence is a stage which forshadows the eventual launching out of the children into their adulthood. This is a period with great emphasis on independence. The challenge, however, is for the family to allow the adolescent to achieve individual autonomy, but at the same time to sustain family interdependence. Family is not an educational institute or training camp from which the adolescent will graduate and have no need to return. Western culture overglorifies the notion of automony and the fact that the family is tied by intense emotional bonds that have a strong drive to preserve the familial link, has often been ignored.

Cohler and Geter (1982) call the struggle between autonomy and interdependencea lifelong problem. Although they are addressing the relationship between the adults and their parents, this is also the case between adolescents and their parents.

> While autonomy and independence are valued as the ideal mode of relationship among adults, interdependence and maintenance of "invisible loyalities" (Boszormenyi-Nagy and Spark, 1973) are more characteristic of actual relationships among these family members. In addition to the feelings of obligation and

> attendence to family loyalities, family members also struggle with an inevitable internal conflict between the wish to care for and the fear of being overly dependent and thus losing a sense of autonomy. This ambivalent stance towards one's need for others is a lifelong problem and is especially sharply defined in family relations. (p. 196 - 197)

Duvall (1977) insists that adolescents need their parents. The feeling that adolescents undervalue adults and believe that adults generally do not appreciate them are general misconceptions. Duvall points to separate studies which find that adolescents have a higher opinion of adults than do their parents, that both generations have favorable opinions of teenagers, and that adolescents rate parent-adolescent relationships more favorably than do their mothers or fathers (Hess and Goldblatt 1957, Henderson, Connor, and Walters, 1961).

During the adolescent period, teenagers may shift their orientation from family to friends. When making important decisions about such concerns as companions, educational plans, and future life goals, however, teenagers tend to be parent-oriented (Stinnett and Walters 1967; Brittain 1963). Furthermore, in critical areas, teenagers' interaction with one another tends to reflect their parents' views (Kandel and Lesser 1972).

The parents also need their adolescent children. In the time of reflecting on the past and feeling the limit of the future, their adolescent offspring provide the link of the past to the continuation of the future. Parenting is a continual development of a

relationship between the parent and the child, instead of a mere task performance for the parents. After the parents' mission of nurturing the child to adulthood is accomplished, the parent/child link will still remain.

To sustain family interdependence, but at the same time achieve autonomy, is an apparently contradictory demand. When there is an apparent paradoxical situation, the existing problem-solving guideline is no longer functional. Therefore, the situation will pressure the family to generate a new system and approach that will promote a different nature of interdependence and autonomy.

The source of psychopathology in adolescence

The challenge of the adolescent stage in the family life cycle is the formation of a new family structure that will enhance the individualization process of the adolescent and at the same time maintain the interdependent link of the family. Leveton (1984) and Karpel and Strauss (1983) both state that the symptomatic behavior is an indicator for either the need to be independent or need to be dependent. These passionate and intense struggles point to a deep ambivalence of both the adolescent's and the family's feeling about the gradual separation process. In a rigid family the adolescent's new behavior may be seen as a threat to family unity while the parents' discipline is interpreted as mistrustful and noncaring.

In a chaotic family where there is no clear leadership and guidance from the parents, the adolescent's independence may be perceived as an abandonment of the weak and incompetent parents. For these families the range of possible alternatives is

limited. The adolescents want the freedom to explore and try out new ideas, but at the same time, need the security and care of the family relationship . The parents want to relinquish their burden of parenting but are afraid to let their children go, as they represent part of themselves.

The family is trapped in a bind. The adolescents, parents, or both, want independence at one level, but don't want it at another level. Since this process cannot be discussed in an open manner, it is negotiated through an indirect struggle.

The dysfunctional families may respond to the crisis of this developmental stage in two ways (Solomon 1976). One way is to arbitrarily crack down on the threatening adolescents. In such a situation the family attempts to recreate an earlier stage of dependency. Often the adolescents are so ambivalent about their development that their behavior is unconsciously stimulated to force their families to make this move.

The other way is to establish a premature independence. These families support only the independent strivings of the adolescents and ignore their equal need of dependency and guidance. This may result in a premature separation of the adolescents from the family at a time when they are ill-equipped to be autonomous. At the end, the adolescents return to the family in a dependent, defeated state.

Cohler and Geter (1982) stated that problems in obtaining satisfying interdependence and autonomy lead to either "centripetal separation" or "centrifugal separation". In the "centripetal separation" the young adults maintain strong attachment and perceive the world as dangerous and are less capable than their family of origin in satisfying their basic needs. In the "centrifugal separation" the young adults are pushed

out of the family because of lack of commitment among family members to the stability of the family unity itself.

According to Stierlin and Ravenscroft (1972) the centripetal pattern of separation has a binding effect on the young adult to the family. As a result, the young adults become overly dependent on their parents. While the parents continue to infantize their children, they also feel the burden which impedes on their own autonomy and causes them to feel resentful. This pattern of separation is characterized by the feeling of ambivalance and guilt in both generations.

The centrifugal separation pattern involves either delegation or expulsion. Delegation is a process of sending the young adults out into the world while fostering a feeling of obligation to the family. The obligation may actually be the achievement of the parents' unfulfilled adventure or ideals. Therefore, the young adults' attempts to obtain autonomy are compromised.

Expulsion is sending the young adult out in the world, largely in order to relieve intrafamilial conflicts because of lack of emotional and/or financial resources. This action taken by these families is mainly the result of enduring neglect and/or rejection of the children. They are pushed into premature and foreclosing autonomy. There is little loyalty or support; only feelings of abandonment and anger.

The emergence of the adolescent stage in the family will most likely test the flexibility of the family organization (Ackerman, 1980). The pathological symptoms occur in the adolescents when the family fails to achieve changes that can accommodate a new form of autonomy and interdependency in the family (Hoffman,

1981; Carter and McGoldrick, 1980; Haley, 1970; and Terkelsen, 1980).

III. RATIONALE

The underlying assumption about the family is that it is a basic social system composed of at least three generations. The family is connected primarily by a high level of emotional intensity which emphasizes attachment, caring, and personal loyalty. It is the primary unit for fulfilling the physical survival and developmental needs of its members. In this system its members cannot but interact either explicitly or covertly with each other and form a collective interaction pattern in dealing with internal and external challenges involving transgenerational issues and developmental and situational stressors. The nature of family system dynamics has significant impact on an individual's behavior.

The objective of this study is to examine the interrelationship between adolescent psychopathology and family functioning characteristics. It is suggested that different types of adolescent psychopathology are associated with different types of family functioning. To examine this assertion, different family groups were comparded in terms of various family functioning characteristics.

Sixty families were included in the present study. Thirty of these families had adolescents with no record of psychiatric treatment. Fifteen families had adolescents who were identified as having Internalizing behavior problems (Internalizing families) and 15 were identified as having Externalizing behavior problems (Externalizing families) according to the results of Child Behavior Checklist. The family functioning

characteristics were measured by the Family Assessment Measure (FAM).

Furthermore, each family, as a social unit, develops a style of interacting among its members and with the outside world which will influence individual family members' willingness and manner to reveal thier family situation to the outside world and the kind of family image that they will like to impress on the others. The FAM results might not necessarily be an indication of the true family situation but a reflection of family interaction styles and family world view. To examine the impact of these factors, the degree of differences in assessment results between family members, in other words, the intra-family discrepancies were compared between different family groups. There are two reasons for choosing this as the dependent variable.

First of all, during the stage of families with adolescents, family conflict and disagreement is expected. The adolescents are in the process of experimenting with different values and beliefs that may deviate from the family traditions. The functional families have the flexibility and resources to accomodate the differences and deal with various crises that arise in this stage. Dysfunctional families lack such capacities and tend to engage in various rigid coping patterns in dealing with the individualization needs of the adolescents.

Secondly, various researchers and clinicians have reported that families with adolescents identifed as having Externalizing behavior problems are associated with the disengaged family structure types in which there are weak family bonds. In this family tpye disagreement between family members are more likely to be tolerated.

Families with adolescents identifed as having Internalizing behavior problems are associated with the enmeshed family structure types which emphasize family cohesion and loyalty. Disagreement between family members may be seen as betrayal of trust (Beavers 1977; Minuchin, 1967, 1974; Olsen et al 1979,1983; Patterson, 1984). The family interaction patterns may restrict or encourage individual members in their disclosure of the family situation through the family assessment inventory. Therefore different degrees of intra-family discrpancy between different family groups were expected.

The following hyptheses were generated:

Hypothesis One. There are significant differences in family functioning characteristics between Externalizing families, Internalizing families, and Non-Clinical families as measured by the FAM.

Hypothesis Two. Different degrees of differences in FAM results between family members are expected between Non-Clinical families, Internalizing families, and Externalizing families.

IV. METHODOLOGY

Operational Definitions

In this study, family functioning characteristics are defined as the performance of the families in seven dimensions of family functioning as measured by the Family Assessment Measure (Santa-Barbara et al, 1978).

Emotionally disturbed adolescents are defined as 1) participants of a clinical treatment program designated for emotionally disturbed adolescents, and 2) The Behavior Problem score obtained from the Child Behavior Checklist (Achenbach, 1979) is within the pathological range.

Assessment Measures

Three assessment measures results were used. The Child Behavior Checklist (Achenbach, 1979) was used as the screening device to identify emotionally disturbed adolescents and types of the behavior problems for the selecion of the Clinical group. The Family Assessment Measure (Santa-Barbara, Steinhauer, Skinner, 1978) was used to assess the family functioning characteristics and the Child Depression Inventory (Kovacs, 1983) was used to assess the level of depression among the Clinical group.

The assessment package for the Clinical group was part of the research material in the treatment outcome research conducted by the Adolescent Group Program. The inventories were filled out by the families as part of the intake procedures for

admission into the treatment program. The Family Assessment Measure was completed by all the adolescents and their parents while the Child Behavioral Checklist results were obtained from the mothers only. The Child Depression Inventory was solely for the adolescents. For the Non-Clinical families, only the results of the Family Assessment Measure were included in this study (The assessment scores of all the subjects in this study are listed in Appendix I).

The Child Behavior Checklist (Achenbach; 1979) is a parental report behavior problem scale for children between 4 - 16 years. It has three scales of social competencies and nine scales of behavior problems. It provides a description of the type and severity of the problems based on the parents' observation of their children's behavior. It distinguishes the disturbed and the heathy child at a statistically significance level of 0.001. Average inter-parent correlation is .74. Average re-test correlation is .89 (Achenbach 1978).

The Child Behavior Checklist categorizes the behavior problems into two general patterns the Internalizing and Externalzing types through Factor Analysis. The Interalizing behavior type refers to anxious-neurotic, withdrawn behavior. The Externaling behavior refers to the acting out, rebellious and aggressive behavior. Futhurmore, using the Cluster Analysis method, Achenbach and Edelbrock (1979) also identifed various behavior problem profile types. For boys between the age 12-16, two profile types, the Schizoid and Uncommunicative, were grouped under the Internalizing behavior problem; and four profile types, Immature-Aggressive,

Hyperactive, Uncommunicative-Delinquent and Delinquent, were grouped under the Externalizing behavior problem. For girls between the ~~age of 12-16~~, there were three profile types under Internalizing behavior problem, including Anxious-Obsessive, Somatic Complaints and Anxious-Obsessive-Aggressive; and three profile types under the Externalizing behavior problem, namely Delinquent, Depressed-Withdrawal-Delinquent and Aggressive-Cruel. For the girls there was one profile type, Hyperactive-Immature, which was classifed as a Mixed behavior problem of Internalizing and Externalizing. Profiles were classified according to the type that they correlated highest with, using a lower cutoff of .00. Agreement between specific profile classifications derived from mothers' and clinician's ratings was 74%.

The checklist provides a Total Behavior Problem Score and Social Competence Score. These scores are normalized T scores with a mean of 50 and a standard deviation of 10. However, they are based on the percentiles of the distribution of the raw score rather than based on the standard deviation of the raw scores. For the Behavior Problem Score, normalized scores ranged from 30 to 100 and were based entirly on percentiles up to a T score of 70 (98th percentile). The T scores from 71 to 89 were assigned to raw scores in intervals ranging from the percentile of the normative sample to the score obtained in the clinical sample of each sex/age sample. The remaining T scores of 90 to 100 are assigned to the remaining possible raw scores. For both girls and boys aged 12-16 the upper limit of the "normal" range in the Behavior Problem is 63 which is above the 90th percentile. The Social Competence

Score was also obtained in a similar fashion. Unlike the Behavior Problem Score, the low Social Competence Score is of clinical significant. The range of Social Competence Score is from 10 to 80 with the lower limit of "normal" range at 38 which is less than 10 percentile.

Achenbach (1979) suggested that individuals can be classified as Internalizers or Externalizers in two ways. First, individuals' total Behavior Problem Score exceeds the 90th percentile for their sex/age group and there is a difference of at least ten points between their Internalizing and Externalizing T scores. Secondly, their overall profile patterns belong to either the Internalizing or Externalizing classification or both. In this study the children in the Clinical group were classified only according to their profile pattern types.

The Children's Depression Inventory (Kovacs, 1980) was to assess the adolescents' degree of depression among the Clinical families. It is a clinical research instrument suitable for use with children aged 8 - 17 years. It is a 27 item self-rated symptom oriented scale assessing the level of depression. The potential score ranges from 0 - 54 with the starting point indicating major depressive disorders at 13. The standard error is 1.29.

The reliability of the test has been verified by different sample populations. In terms of internal consistency, the reliability coefficient of a psychiatrically referred sample of 75 was .86, for a pediatric-medical outpatient group of 61 it was .71, and for a large public school sample of 860 it was .87. The test-retest result for 29 juvenile

diabetics was .43 and for a school sample of 90 it was .82. Using the large public school sample, a Factor Analysis was conducted. It yielded one principal factor with an eigenvalue of 5.95 that accounted for 63.7% of the variance (Kovacs 1983).

The Family Assessment Measure (Santa-Barbara, Steinhauer, Skinner, l978) is a 115-item self-report instrument that was designed to draw a quantitative measure of the general level of health-pathology functioning. Each family member responded to the questions in the inventories according to his/her perception of the family situation. The measure consists of one subscale, Social Disability, to measure the level of denial-defensiveness of the respondent. There are seven sub-scales used to assess areas of family strengths and weaknesses in seven family functioning dimensions as formulated according to the Process Model of Family Functioning including: Task Accomplishment, Role Performance, Communication, Affective Expression, Affective Involvement, Control, and Values and Norms.

The Task Accomplishment subscale assesses the family's ability in achieving the basic, developmental and crisis tasks. The Role Performance subscale assesses the success of the family in family role integration. The Communication and Affective Expression subscales assess the effectiveness of the family in gaining mutual understanding between members. The Affective Involvement subscale assesses the ability of the family in meeting its members' needs of security and autonomy. The Control subscale assesses the family's ability to maintain the ongoing functioning of the family and its capacity for adaptation when necessary. The Values and Norms

subscale assesses the nature of the family's belief system and its impact on the family's ongoing functioning. The standard score is 50 with a standard deviation of l0 for each subscale. Scores above 60 indicate possible dysfunctioning in the family whereas scores below 40 may suggest possible strength.

In developing the original scale, the best 30 items for each scale drawn from a large pool of items was adminstered to 433 individuals that represented 182 clinical and non-clinical families. The median internal consistency reliability was.93 for the 30-item scale and .87 for the best 10. The scale used in the present study was a shorter form which was designated as FAM-II. A more updated version, FAM-III has also been developed.

Subjects

Clinical group. The subjects were selected from the case files of adolescents who were enrolled in the Adolescent Group Program, Alberta Mental Health Services, between 1981-1983. The program is located in Edmonton, Alberta. It is a community based assessment and treatment service for emotionally disturbed adolescents aged 12-18 years. It provides a full range of diagnostic and evaluative services as well as treatment for adolescents and their families. The treatment program includes group therapy, family therapy and ancillary therapies.

The Program consists of a Diagnostic Unit, a Day Program with a psychoeducational component, an Evening Program, a Follow-up Group and a Residential Treatment Unit. Adolescents who are enrolled in the Day Program are

those who require full day therapy and programming. They had often failed to respond to brief counselling and therapy. The day program is an alternative to hospitalization or institutionalization. These adolescents are experiencing difficulties in three or four of the following areas: self, family, peers and/or school. The program operates 4 days per week and 6 hours per day.

The Evening Program is for adolescents who require a more intensive treatment program than that offered by regular counselling services. These adolescents experience difficulties in one or two of the four areas of self, family, peers, and/or school. The program operates 2 evenings per week for 3.5 hours per evening. A residential treatment unit exists for more severe cases.

Program admission is voluntary and admission criteria are not based on formal diagnosis, but rather on the willingness of the adolescent and family to participate in the program. Reasons for exclusion are as follows: 1) lack of cooperation of the adolescent and/or the parents in the treatment process; 2) WISC-R<75 Full Scale score; 3) Adolescents judged to be harmful to themselves or others for which a more secure placement is needed; 4) Severe drug and alcohol dependency; 5) Adolescents who are in active legal proceedings.

The client population consisted of a full range of psychiatric symptoms and were from all socioeconomic backgrounds. In the day program, adolescents attended a special education program instead of regular school. The average IQ was in the low average range and nearly half were below the expected grade level in school

placement. The most frequently reported problem among adolescent girls in the program was truancy whereas behavior problems and school absenteeism were the most common complaints for the boys.

The treatment utilized by the program is a systemic-oriented psychodynamic approach in conjunction with the milieu therapy. The program is under the directorship of a child psychiatrist with a multi-disciplinary staff consisting of psychiatrists, program managers, psychologists, nurses, social workers, teachers and a researcher.

From all the adolescents who were enrolled in the program between 1981 - 1983, a total of 30 adolescent-parent triads were chosen because they met the selection criteria for this study. The selection critieria for the adolescent were as follows: 1) he/she should be between 12-16 years old, the age range specified by the Child Behavior Checklist; 2) he/she should be from a two parent family; 3) he/she should have a Behavioral Problem T-Score obtained from the Child Behavioral Checklist (Achenbach, 1979) equal to or above 63 which is above the 90th percentile; 4) he/she should have completed assessment inventories that were of interest to this study.

The Clinical group was divided into two sub-groups: the Externalizing and Internalizing, according to their profile type as indicated by the Child Behavioral Checklist. Fifteen of the adolescents were classified as having internalizing behavioral problems and fifteen of them as having externalizing behavior problems. Their ages ranged from 12 - 16 years with a mean age of 13.8 years.

Among the Internalizing groups, 53.3% were girls, and 46.7% were boys. The

mean Behavior Problem T-Score was 71.5 (SD=6.9) and the mean Social Competence T-Score was 38.1 (SD= 6.6). In terms of behavior problem profile types, 25% of the girls were described as having Somatic Complaints, 50% were described as Anxious-Obessive-Aggressive, while 25% were described as Anxious-Obsessive. With the boys, 71.4% were described as Schizoid, while 28.6% were described as Uncommunicative.

Among the Externalizing groups, 60% were girls, and 40% were boys. The mean Behavior Problem T-Score was 73.5 (SD=5.6) and the mean Social Competence T-Score was 35.5 (SD= 4.9). In terms of profile types, 66.7% of the girls were described as Aggressive-Cruel while 33.3% were described as Depressed-Withdrawal-Delinquent. With the boys, 33.3% were described as Immature-Aggressive, 16.7% as Hyperactive, 33.3% as Delinquent and 16.7% as Uncommunicative-Delinquent.

The Children's Depression Scales scores were included to indentify the level of depression among adolescents of the two Clinical groups. Both groups were within the clinically depressive range. The Internalizing Adolescents had a mean score of 18.3 (SD= 13.2) and the Externalizing group had a mean score of 14.7 (SD= 7.6).

Within the Clinical family groups, the fathers' ages ranged from 36 - 63 years with an average of 47.6 years and the mothers' ages ranged from 30 - 57 years with a mean age of 42.8 years. Among the fathers, 48.3% were non-skilled or semi-skilled labourers and 13.8% were skilled tradesmen. Among the fathers, 17.2% of them were

involved in clerical or sales type of employment and 20.7% were employed in middle management positions.

Among the mothers 22.2% were non-skilled or semi-skilled labourers, 18.5% were in clerical or sales type of employment, 18.5% were in in middle management positions, and 40.7% were homemakers.

Not all subjects had given demographic information, but this did not affect the outcome as Blackman et al (1986) did not find any differences in a previous study between the study group and those who did not fully complete the assessment measures on any of the demographic variables.

Nonclinical Group. Families for the nonclinical group were chosen from a normative population for the development of the Family Assessment Measure (Santa-Barbara, Steinhauer, Skinner; 1978). Subjects were participants in the research project between 1979 - 1981.

The Non-Clinical families were those who have had no clinical treatment involvement for psychosocial disorders within the past five years. They were drawn from a variety of sources, such as schools, provincial parks, and the Ontario Science Center. For this study families were chosen with the following criteria: 1) they should be from a two-parent family; 2) they should have at least one adolescent child between the age of 12 - 16 years and should there be more than one adolescent in the family group meeting the age criterion only one was selected on a random basis.

There was a total of 30 out of 54 families meeting the selection criteria. The age

range of adolescents was between 13 - 16 years with a mean age of 14.5 years. Of the total, 47% were boys and 53% were girls. The fathers' age range was from 36 - 63 years with an average age of 46.8 years. The mothers' average age was 42.3 years with a range from 33 - 57 years.

For fathers, 6.9% were non-skilled or semi-skilled labourers, 13.8% were skilled tradesmen, 24.1% of the fathers were employed in middle management positions and 55.2% involved in senior positions.

Among the mothers, 6.7% were non-skilled or semi-skilled labourers, 3.3% were skilled tradespersons, 20% were in clerical or sales, 3.3% were employed in midldle management, 20% in senior positions, and 46.7% were homemakers.

Selection of Statistical Approaches

Lewis et al (1976) suggested that the pattern of the family's interaction is a more important differentiating feature than the individual family functioning dimension. The qualitative differences could be best evaluated by using the multiple variable approach. Kerlinger (1973) stated that behavior problems are almost all multivariate in nature and cannot be solved with a bivariate approach which considers only one dependent and one independent variable at a time.

The family assessment scores obtained from the adolescent-parents unit were treated as three separate family groups namely, the Father, Mother, and Adolescent groups. To assess the interaction nature of family functioning characteristics between the two Clinical groups and the Non-Clinical group in this study, the Multivariate

Profile Analysis was used. The computer program was written by Bay and Hunka (1981) of the Division of Educational Research Services, Faculty of Education, the University of Alberta.

The profile analysis includes four tests: Test I, One-Way Multivariate Analysis of Variance, is used to assess the difference of the vector of variable means between groups; Test 2, Test for Parallelism of Profile-Line Segments, is used to assess whether the different profiles are of the same shape; Test 3, Test for Equal Mean Profile Effects is used to test the hypothesis that the mean of the means of the separate variables is identical for the different groups. In this case even though the profile patterns are different, one is the reversal of the other; and Test 4, Test for Equal Variable Effects is used to assess the mean of each variable calculated over groups. Only the results of Test 1, 2 and 3 were reported, because these three tests assessed the between group differences between family groups and whereas Test 4 was a test for between variable effects between the FAM subscales which is not relevent to the present study.

Test 1, the One-Way Multivariate Analysis, provides a generalization of one-way univariate analysis of variance. It reduces each subject's scores on different variables to a single number by applying a linear combining rule to the scores of the original variable set. The One-Way Multivariate Analysis consists of a search for that linear combination of variables which maximally discriminates among different groups. This is achieved by producing the largest possible univariate F-ratio, and comparing it to a

critical F value with consideration to the chance factor. The reducton to a single number makes the multi-variate analysis much more conservative than the univariate analysis (Harris,1975).

Test 2, the test of parallelism, is a measure of the interaction effect between variables and groups. It compares the difference of profile patterns between groups. If Test 2, the Test of Parallelism is not significant, that is, the profile patterns between groups are parallel and identical to each other and the result implies that there are no significant profile differences between these groups. Each outcome measure must be compared separately because the magnitude and/or direction of the difference between groups varies depending on which variable is considered.

Furthermore, the result of Test 3, the Test of Equal Mean Profile Effects, and the Test 4, Test for Equal Variable Effect are essentially noninterpretable, since the significant interaction between groups and measures implies that both are significant sources of variance, the magnitude of their influence depending, however, on the level of the other source of variation in responses (Harris, 1975).

Since the Multivariate Profile Analysis has to consider all variables at the same time, its results are more conservative. It will more likley accept the null hypothesis. Therefore univariate method, Scheffe's Test for Multiple Comparisons, was also applied to identify more specific differences in specific variables between the three groups. Using the One-way Analysis of Variance, Scheffe's test is based on the comparision of between group mean differences instead of the group sum. It allows

researchers to make the comparison without making specific plans in advance. Scheffe's test is only useful, however, when the between group differences are significantly greater than the within group differences (Harris, 1975).

To test the hypothesis in the present study, the profile analysis was applied. In addition, the Scheffe's test was used to investigate differences between individual subscale variables between groups.

V. RESULTS

The Family Assessment Measure was used to assess the family functioning characteristics of the Internalizing, Externalizing and Non-Clinical families. The Non-Clinical families were families with an adolescent which had no psychiatric

Table 1. Means of Family Assessment Measure Subscale of Internalizing, Externalizing and Non-clinical Families

Family Assessment Measure Subscales		Internalizing Families N = 15			Externalizing Families N = 15			Non-Clinical Families N = 30		
		Father	Mother	Adolescent	Father	Mother	Adolescent	Father	Mother	Adolescent
Task Accomplishment	mean	57	54	59	63	61	70	49	48	53
	SD	11.3	9.4	17.6	11.6	11.2	12.6	5.7	8.7	9.7
Role Performance	mean	53	54	52	59	65	65	51	51	52
	SD	12.4	11.5	12.6	11.3	9.2	9.8	9.1	7.1	7.5
Communication	mean	57	55	60	61	59	66	50	48	51
	SD	8.1	6.2	12.5	10.5	9.8	10.8	8.5	8.4	9.1
Affective Expression	mean	56	54	60	59	57	64	49	47	52
	SD	10.1	7.9	13.6	11.4	7.3	10.0	7.8	7.9	8.2
Affective Involvement	mean	56	52	60	66	65	73	49	48	50
	SD	11.3	9.3	19.1	12.7	15.4	13.6	7.7	9.1	10.1
Control	mean	56	54	59	62	59	68	50	48	52
	SD	10.9	6.9	13.8	8.0	11.1	9.0	6.7	6.8	7.0
Values and Norms	mean	57	54	60	61	60	70	48	48	53
	SD	8.0	6.8	16.8	9.1	11.3	10.4	6.1	6.7	8.4
Social Desirability	mean	48	50	50	42	44	41	53	52	51
	SD	13.8	6.1	10.7	7.5	7.7	9.2	7.9	8.9	9.3

treatment record. The Internalizing families included families with an adolescent who, according to the Child Behavior Checklist profile pattern type, was identified as having Somatic Complaints, was Anxious- Obsessive-Aggressive, Anxious-Obsessive, Schizoid or Uncommunicative.

The Externalizing families included families with an adolescent who, according to the profile pattern types, was identifed as Aggressive-Cruel, Depressed-Withdrawal-Delinquent, Immature-Aggressive, Hyperactive, Delinquent, or Uncommunicative-Delinquent. There were no significant differences in terms of Behavior Problems Score (t=-0.87, p=0.391) and Social Competence Score (t=1.12, p=0.276) between the Internalizing and Externalizing Adolescents. The Children Depression Inventory Scores also showed no significant difference (t=0.92, p=0.369).

The Family Assessment Measure has eight subscales,Task Accomplishment (TA), Role Performance (RP), Communication (COM), Affective Expression (AFE), Affective Involvement (AFI), Control (CTRL), Values and Norms (V&N), and Social Desirability (SDs). The means and the standard deviations of the subscale scores are shown in Table 1. A wider range of standard deviation was found among the adolescents of the Internalizing familiies in three subscales, Task Accomplishment, Affective Involvement, and Values and Norms. This was the result of a wide range of scores responding to these scales among this group.

Hypothosis One

There are significant differences in family functioning characteristics

between Externalizing families, Internalizing families, and Non-Clinical families as measured by the FAM.

The Multivariate Profile Analysis was conducted by comparing Family Assessment Measure (FAM) subscale scores of the Internalizing, Externalizing and Non-Clinical families.

The fathers, mothers and adolescents of the three groups were examined separately. The Multivariate Profile Analysis results support Hypothesis One. There was a significant difference among all three family groups.

For the Father group, the profiles are shown in Figure 2. The result of profile analysis is listed in Table 2. The profiles of the Mother group are shown in Figure 3. The results of the profile analysis are listed in Table 3. The profiles of the Adolescent group are shown in Figure 4. The results of the profile analysis are listed in Table 4.

Tests 1, 2 and 3 were statistically significant at the 0.01 level among the Father, Mother and Adolescent groups. The results of Test One suggest that there were differences between Internalizing, Externalizing, and Non-Clinical groups when all FAM subscales scores were compared altogether. The results of Test 2 show and that there was an interaction effect between groups and subscale scores. The profile of each group was different from each other. The results of Test 3 suggest that these families did not have the same total subscales means, and therefore, the difference of profile patterns was not that one is the reversal of the others.

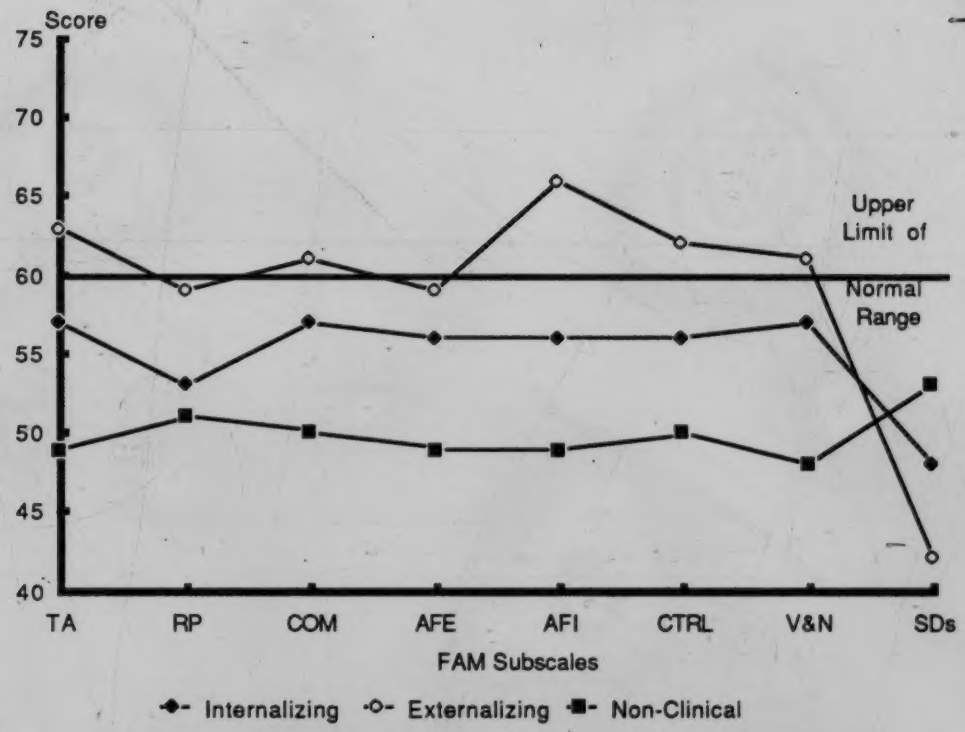

Figure 2. FAM Subscale Profile of Fathers of Internalizing, Externalizing and Non-Clinical Families

Table 2. Multivariate Profile Analysis of Fathers' FAM Scores: Internalizing vs Externalizing vs Non-Clinical Families

Test 1 (One way MANOV)	f = 3.326	df1 = 16.0	df2 = 100.0	p = 0.000
Test 2 (Parallelism)	f = 3.669	df1 = 14.0	df2 = 102.0	p = 0.000
Test 3 (Equal Mean)	f = 11.653	df1 = 2.0	df2 = 57.0	p = 0.000

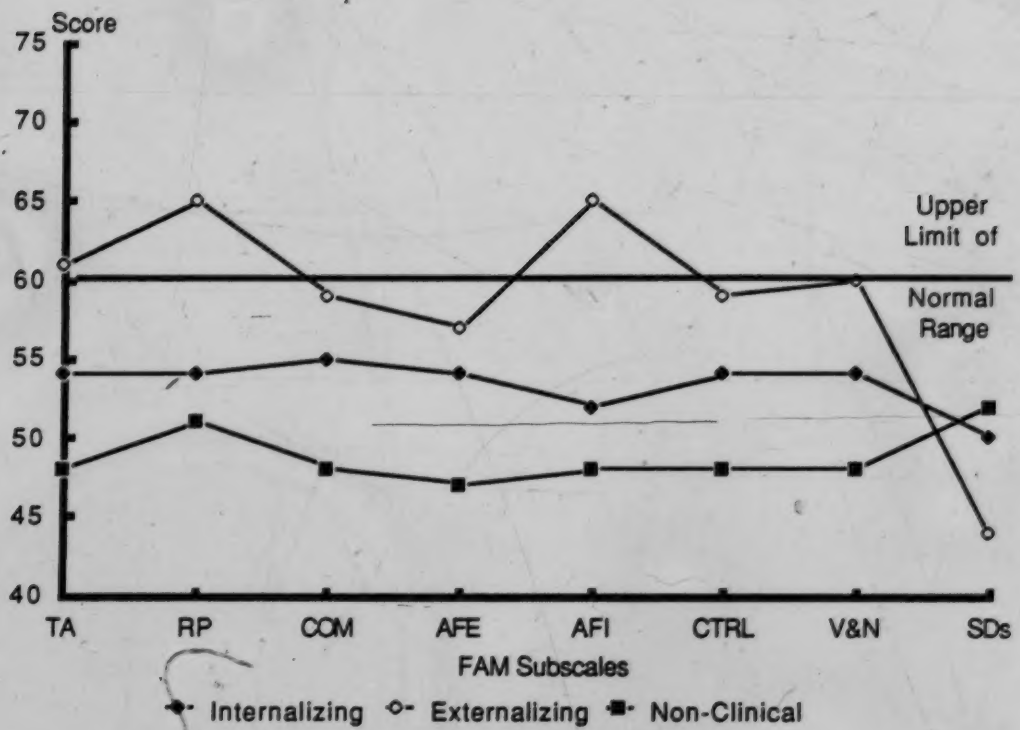

Figure 3. FAM Subscale Profile of Mothers of Internalizing, Externalizing and Non-Clinical Families

Table 3. Multivariate Profile Analysis of Mothers' FAM Scores: Internalizing vs Externalizing vs Non-Clinical Families

Test 1 (One way MANOV)	f = 2.456	df1 = 16.0	df2 = 100.0	p = 0.004
Test 2 (Parallelism)	f = 2.282	df1 = 14.0	df2 = 102.0	p = 0.009
Test 3 (Equal Mean)	f = 14.294	df1 = 2.0	df2 = 57.0	p = 0.000

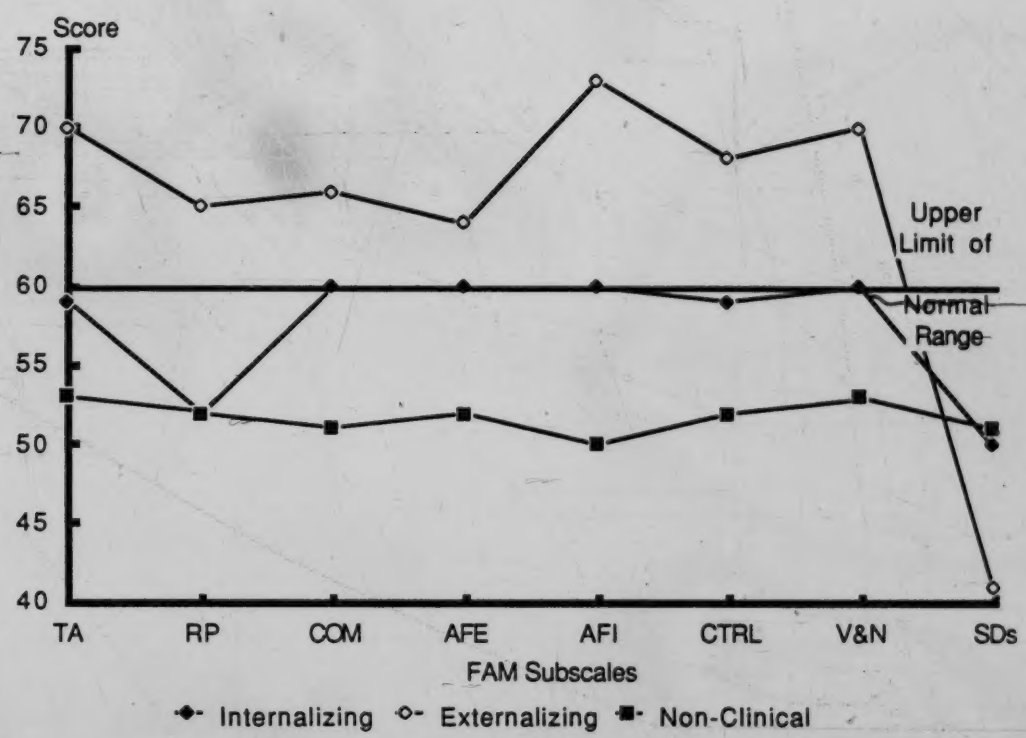

Figure 4. FAM Subscale Profile of Adolescent of Internalizing, Externalizing and Non-Clinical Families

Table 4. Multivariate Profile Analysis of Adolescents' FAM Scores: Internalizing vs Externalizing vs Non-Clinical Families

Test 1 (One way MANOV)	f = 3.044	df1 = 16.0	df2 = 100.0	p = 0.000
Test 2 (Parallelism)	f = 2.568	df1 = 14.0	df2 = 102.0	p = 0.003
Test 3 (Equal Mean)	f = 14.383	df1 = 2.0	df2 = 57.0	p = 0.000
Test 4 (Equal Variable Effects)	f = 3.774	df1 = 7.0	df2 = 51.0	p = 0.002

Although the results of the Multivariate Profile Analysis comparing the

significant differences between them, the results did not specify the nature of the differences. To further investigate the family functioning characteristics between the Internalizing and Externalizing families, the profile analysis was conducted between these two groups. The results did not show any significant difference.

The profile analysis results are listed in Tables 5, 6 and 7. There were no significant differences between the Internalizing and Externalizing groups across all family groups in Test 1 and 2, the One Way Multivariate Analysis and the test of profile parallelism, at 0.05 level. Since these two tests were not significant, the results of Tests 3 are not meaningful.

Table 5. Multivariate Profile Analysis of Fathers' FAM Scores: Internalizing vs Externalizing Families

Test 1 (One way MANOV)	f = 0.799	df1 = 8.0	df2 = 21.0	p = 0.610
Test 2 (Parallelism)	f = 0.951	df1 = 7.0	df2 = 22.0	p = 0.489
Test 3 (Equal Mean)	f = 2.205	df1 = 1.0	df2 = 28.0	p = 0.149

Table 6. Multivariate Profile Analysis of Mothers' FAM Scores: Internalizing vs Externalizing Families

Test 1 (One way MANOV)	f = 1.177	df1 = 8.0	df2 = 21.0	p = 0.358
Test 2 (Parallelism)	f = 1.400	df1 = 7.0	df2 = 22.0	p = 0.255
Test 3 (Equal Mean)	f = 4.950	df1 = 1.0	df2 = 28.0	p = 0.034

Table 7. Multivariate Profile Analysis of Adolescents' FAM Scores: Internalizing vs Externalizing Families

Test 1 (One way MANOV)	f = 1.224	df1 = 8.0	df2 = 21.0	p = 0.333
Test 2 (Parallelism)	f = 1.446	df1 = 7.0	df2 = 22.0	p = 0.238
Test 3 (Equal Mean)	f = 4.323	df1 = 1.0	df2 = 28.0	p = 0.047

The non-significant results obtained in the profile analysis of these two groups may suggest that the differences as indicated in the three groups' comparison might be due to the differences between the Clinical and the Non-Clinical families instead of differences between the Internalizing and Externalizing group.

The result of the two groups' analysis, however, when compared with the three groups' analysis should be used with caution. The lack of significant differences between the Externalizing and Internalizing groups may also be due to the change of degrees of freedom in the analysis of variance because of the reduction of sample size. Therefore the results tend to be more conservative for the two group analysis than that of the three. The analysis is more likely to accept the null hypothesis of no differences than rejecting it. Futhermore, the test of profile differences is a test of interaction effect of group and mean FAM subscale scores. The omission of one group changes the nature of interaction effects.

While the differences between the Externalizing and the Internalizing family groups may not be significiant statistically, attention should be given to the nature of the score. The Externalizing group's profiles were in the dysfunctional range, while the

Internalizing group's profiles fell between the Externalizing group and the Non-Clinical group with the normative range.

The Multivariate Profile Analysis aims at producing a single linear combination of all the subscale score means. The confidence level for the analysis is for the total eight subscales instead of for each scale as in the univariate analysis. Therefore the Multivariate Profile Analysis result is much more conservative than the univariate analysis and accepts the null hypothesis. Whereas, the univariate analysis tends to reject the null hypothesis more readily.

With this caution, a univariate approach, Scheffe's Test for Multiple Comparisons, which ultilized the One-Way Analysis of Variance (ANOV), was used to examine how the Internalizing, Externalizing and Non-Clinical families differ from each other on each FAM subscale. The Father, Mother and Adolescent groups were examined separately.

The results of the Father group are shown in Table 8. There are a total of eight subscales in the Family Assessment Measure including Task Accomplishment, Role Performance, Communication, Affective Expression, Affective Involvement, Control, Values and Norms and Social Desirability. Using the Scheffe procedure, the results indicated that the Externalizing Father group was significantly different from the Non-Clinical Father group at the 0.05 level in seven subscales except Role Performance. The Externalizing Father group had higher scores than the Non-Clinical Father in six of these seven scales. The only difference was in the Social Desiralibility scale in which the Externalizing Father group have received a significantly lower score.

The Internalizing Father group was different from the Non-Clinical Father group only in three subscales including Task Accomplishment, Control and Values and Norms. They had higher scores than the Non-Clinical Fathers. Compared with the Externalizing Father group, the Internalizing Fathers scored lower in the Affective Involvement subscale.

Table 8. One-Way Analysis of Variance & Scheffe's Comparison of Fathers' FAM Score of Externalizing, Internalizing and Non-Clinical Families

	Mean Subscale Score of FAM			Analysis of Variance	
	Internalizing	Externalizing	Non-Clinical		
Task Accomplishment	57~	63*	49*~	f = 13.309 df1 = 2.0	p = 0.000 df2 = 57.0
Role Performance	53	59	51	f = 2.842 df1 = 2.0	p = 0.067 df2 = 57.0
Communication	57	61*	50*	f = 8.711 df1 = 2.0	p = 0.001 df2 =57.0
Affective Expression	56	59*	49*	f = 6.140 df1 = 2.0	p = 0.004 df2 = 57.0
Affective Involvement	56~	66*~	49*	f = 14.422 df1 = 2.0	p = 0.000 df2 = 57.0
Control	56~	62*	50*~	f = 11.042 df1 = 2.0	p = 0.000 df2 = 57.0
Values and Norms	57~	61*	48*~	f = 17.113 df1 = 2.0	p = 0.000 df2 = 57.0
Social Desirability	48	42*	53*	f = 6.773 df1 = 2.0	p = 0.002 df2 = 57.0

(* and ~) Denote Significant Differences at the 0.050 Level Using Scheffe Procedure

The comparison results of the Mother groups are shown in Table 9. Using the Scheffe's method, the Externalizing Mother group received significantly higher scores in all subscales than the Non-Clinical Mother group at the 0.05 level, except the Social

Desirability scale in which they had a lower score. Compared with the Non-Clinical Mother group, the Internalizing Mothers had higher scores in Communication and Affective Expression subscales.They obtained lower scores than the Externalizing Mother in Role Performance and Affective Involvement.

Table 9. One-Way Analysis of Variance & Scheffe's Comparison of Mothers' FAM Score of Externalizing, Internalizing and Non-Clinical Families

	Mean Subscale Score of FAM				
	Internalizing	Externalizing	Non-Clinical	Analysis of Variance	
Task Accomplishment	54	61*	48*	f = 8.674 df1 = 2.0	p = 0.001 df2 = 57.0
Role Performance	54~	65*~	51*	f = 12.609 df1 = 2.0	p = 0.000 df2 = 57.0
Communication	55~	59*	48*~	f = 11.217 df1 = 2.0	p = 0.000 df2 =57.0
Affective Expression	54~	57*	47*~	f = 7.872 df1 = 2.0	p = 0.001 df2 = 57.0
Affective Involvement	52~	65*~	48*	f = 12.299 df1 = 2.0	p = 0.000 df2 = 57.0
Control	54	59*	48*	f = 10.326 df1 = 2.0	p = 0.000 df2 = 57.0
Values and Norms	54	60*	48*	f = 11.300 df1 = 2.0	p = 0.000 df2 = 57.0
Social Desirability	50	44*	52*	f = 4.886 df1 = 2.0	p = 0.011 df2 = 57.0

(* and ~) Denote Significant Differences at the 0.050 Level Using Scheffe Procedure

Table 10 shows the comparison results of the Adolescent group. Similar to the other two family groups, the Externalizing Adolescent group was significantly different from the Non-Clinical Adolescent group in all eight subscales. All scales had higher scores except the Social Desirability subscale in which the group had a lower score.

The Internalizing Adolescent group had lower subscale scores in Role Performance, Affective Involvement and Control than the Externalizing Adolescent group but had a higher score than the Non-Clinical Adolescent group in Communication.

Scores in the Family Assessment Measure are normalized such that each scale has a mean of 50 and a standard deviation of 10. Scaled Scores that exceed one standard deviation are more likely to indicate either a very healthy functioning (below standard of 40) or disturbance (above standard score of 60). Another way to understand how the Internalizing, Externalizing and Non-Clinical families are different from each other, then, is to compare the number of subscale scores which fall within the dysfunctional range.

None of the Internalizing and Non-Clinical family groups' subscale scores fell within the dysfunctional range. This was not the case with the Externalizing family groups. The Externalizing Father had five of eight subscale scores which exceeded the score of 60. They included Task Accomplishment, Communication, Affective Involvement, Control and Values and Norms. For the Externalizing Mothers, the scores of Task Accomplishment, Role Performance and Affective Involvment were above 60. All of the subscale scores of the Externalizing Adolescents were over 60 and Affective Involvement was in the 70's range.

Table 10. One-Way Analysis of Variance & Scheffe's Comparison of Adolescents' FAM Score of Externalizing, Internalizing and Non-Clinical Families

	Mean Subscale Score of FAM				
	Internalizing	Externalizing	Non-Clinical	Analysis of Variance	
Task Accomplishment	59	70*	53*	f = 8.583 df1 = 2.0	p = 0.001 df2 = 57.0
Role Performance	52~	65*~	52*	f = 10.442 df1 = 2.0	p = 0.000 df2 = 57.0
Communication	60~	66*	51*~	f = 12.027 df1 = 2.0	p = 0.000 df2 =57.0
Affective Expression	60	64*	52*	f = 7.041 df1 = 2.0	p = 0.002 df2 = 57.0
Affective Involvement	60~	73*~	50*	f = 13.891 df1 = 2.0	p = 0.000 df2 = 57.0
Control	59~	68*~	52*	f = 14.263 df1 = 2.0	p = 0.000 df2 = 57.0
Values and Norms	60	70*	53*	f = 11.502 df1 = 2.0	p = 0.000 df2 = 57.0
Social Desirability	50	41*	51*	f = 5.493 df1 = 2.0	p = 0.007 df2 = 57.0

(* and ~) Denote Significant Differences at the 0.050 Level Using Scheffe Procedure

The results suggest that the Externalizing group had more areas of family dysfunctioning whereas the Internalizing group was more similar to the Non-Clinical group which appeared to function within a normal range.

Hypothesis Two

Different degrees of differences in FAM result between family members are expected between Non-Clinical families, Internalizing families, and Externalizing families.

The Multivariate Profile Analysis was used to assess the profile difference between the Father, Mother and Adolescent groups. Each of the Clinical and

Non-clinical groups were examined separately. The results partially support this hypothesis.

The FAM profiles of the Non-Clinical family group are shown in Figure 5 and the results of profile analysis is shown in Table 11. Both Test 1 and 2 were significant at 0.05 level which suggest that there was significant difference between the Father, Mother and Adolescent group. Their profiles were different from each other. The result of Test 3 , however, was not significant at 0.05 level which suggests that there was profile reversal effect. These results indicated that what would score high in one profile would score low on the other.

Table11. Multivariate Profile Analysis of Non-Clinical Families' FAM Scores: Father vs Mother vs Adolescent

Test 1 (One way MANOV)	f = 1.841	df1 = 16.0	df2 = 160.0	p = 0.030
Test 2 (Parallelism)	f = 1.741	df1 = 14.0	df2 = 162.0	p = 0.052
Test 3 (Equal Mean)	f = 2.707	df1 = 2.0	df2 = 87.0	p = 0.072

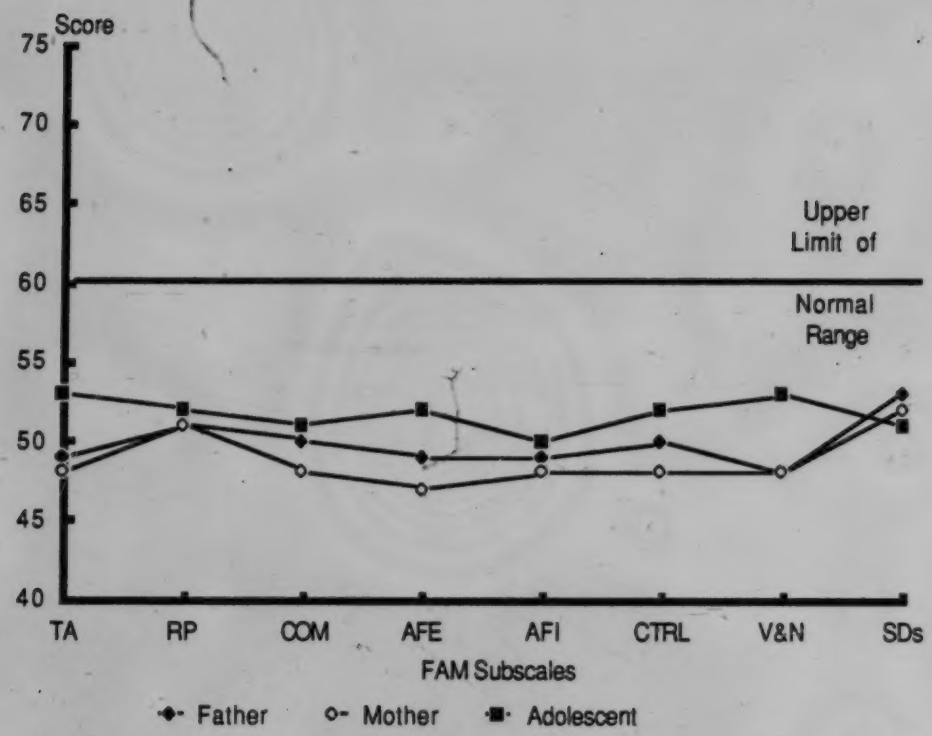

Figure 5. FAM Subscale Profile of Non-Clinical Families of Father, Mother, and Adolescent

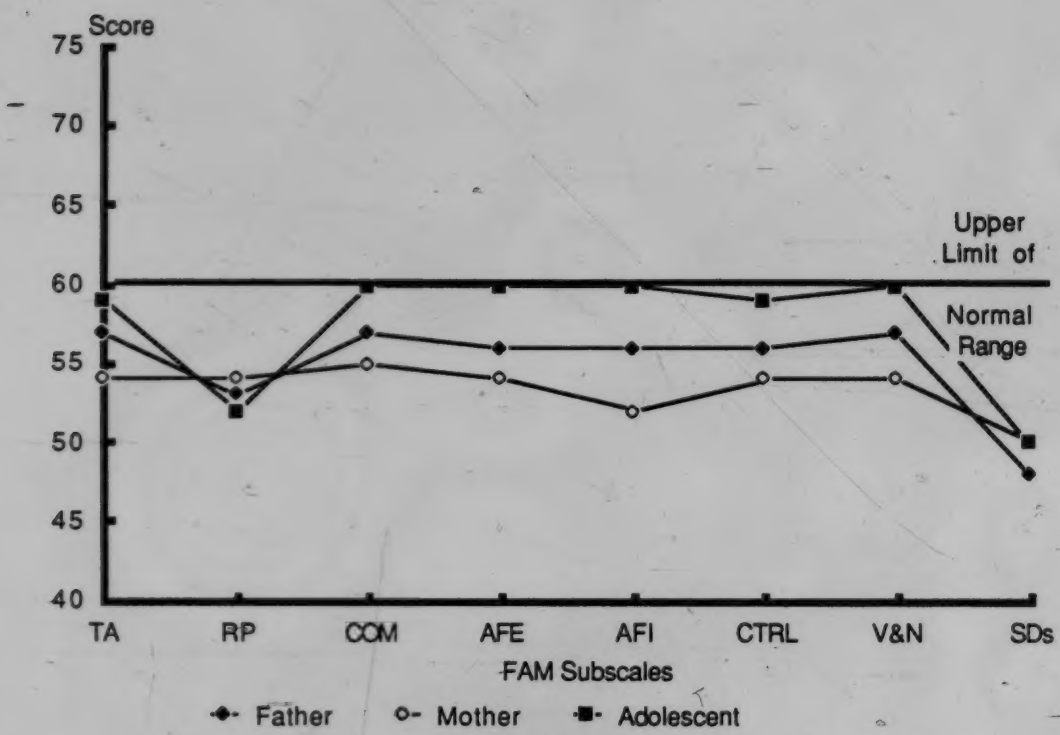

Figure 6. FAM Subscale Profile of Internalizing Families of Father, Mother, and Adolescent

Table 12. Multivariate Profile Analysis of Internalizing Families' FAM Scores: Father vs Mother vs Adolescent

Test 1 (One way MANOV)	f = 0.793	df1 = 16.0	df2 = 70.0	p = 0.688
Test 2 (Parallelism)	f = 0.743	df1 = 14.0	df2 = 72.0	p = 0.724
Test 3 (Equal Mean)	f = 1.002	df1 = 2.0	df2 = 42.0	p = 0.376

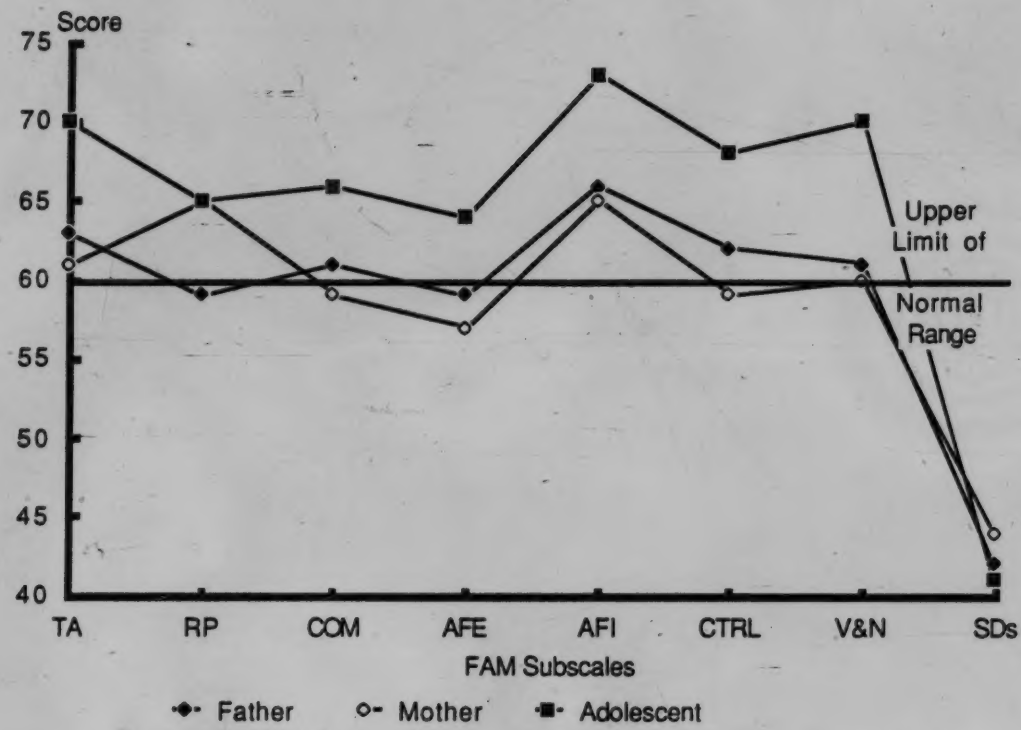

Figure 7. FAM Subscale Profile of Externalizing Families of Father, Mother, and Adolescent

Table 13. Multivariate Profile Analysis of Externalizing Families' FAM scores: Father vs Mother vs Adolescent

Test 1 (One way MANOV)	f = 1.504	df1 = 16.0	df2 = 70.0	p = 0.123
Test 2 (Parallelism)	f = 1.471	df1 = 14.0	df2 = 72.0	p = 0.144
Test 3 (Equal Mean)	f = 3.180	df1 = 2.0	df2 = 42.0	p = 0.052

The FAM profiles of theInternalizing and Externalizing families are shown in Figures 6 and 7. The profile analysis results of the Internalizing and Externalizing groups are shown in Tables 12 and 13. In both groups, Test 1, One-Way MANOV, and Test 2, test for parallelism, were not significant at the 0.05 level. Since these two results are not significant, the outcomes of Test 3 is not meaningful for the interpretation. The results suggest that there were no profile differences between the father, mother, and adolescent in the Internalizing and Externalizing groups. The results suggest that there were no differences between the family groups' perception of the family situation in both family types.

From the appearance of the profiles of the Clinical and the Non-Clinical groups as shown in Figure 5, 6 and 7, it is difficult to believe that the profile differences were found in the Non-Clinical families but not in the two Clinical family groups. Table 2 shows that the Clinical groups had a greater range of Standard Deviation in the subscale scores than the Non-clinical group. This suggests that there was greater within group variability in the Clinical groups than the Non-Clinical group. As a result, the Non-Clinical family groups required smaller range of variation and therefore were more likely to have differences between groups.

Table 14. One-Way Analysis of Variance & Scheffe's Comparison of Non-Clinical Families' FAM Score of Father, Mother, and Adolescent

	Mean Subscale Score of FAM			Analysis of Variance	
	Father	Mother	Adolescent		
Task Accomplishment	49	48	53	f = 3.049 df1 = 2.0	p = 0.053 df2 = 87.0
Role Performance	51	51	52	f = 0.091 df1 = 2.0	p = 0.913 df2 = 87.0
Communication	50	48	51	f = 1.121 df1 = 2.0	p = 0.331 df2 = 87.0
Affective Expression	49	47	52	f = 2.949 df1 = 2.0	p = 0.058 df2 = 87.0
Affective Involvement	49	48	50	f = 0.614 df1 = 2.0	p = 0.543 df2 = 87.0
Control	50	48*	52*	f = 3.313 df1 = 2.0	p = 0.041 df2 = 87.0
Values and Norms	48*	48	53*	f = 4.267 df1 = 2.0	p = 0.017 df2 = 87.0
Social Desirability	53	52	51	f = 0.257 df1 = 2.0	p = 0.774 df2 = 87.0

(*) Denotes Significant Differences at the 0.050 Level Using Scheffe Procedure

Since the Multivariate Profile Analysis is a more conservative statistical analysis, the Scheffe Multiple Comparision was also applied to indentify various family groups differences from each other on each FAM subscale.

Table 14 shows the results of the Non-Clinical families. It indicated that there were differences between family groups in their perception of the family functioning situation. The Adolescent group showed a higher score in Control than the Mother and was higher in Values and Norms than the Father group.

Table 15. One-Way Analysis of Variance & Scheffe's Comparison of Internalizing Families' FAM Score of Father, Mother, and Adolescent

	Mean Subscale Score of FAM			
	Father	Mother	Adolescent	Analysis of Variance
Task Accomplishment	57	54	59	f = 0.589 df1 = 2.0 p = 0.559 df2 = 42.0
Role Performance	53	54	52	f = 0.082 df1 = 2.0 p = 0.921 df2 = 42.0
Communication	57	55	60	f = 1.191 df1 = 2.0 p = 0.314 df2 = 42.0
Affective Expression	56	54	60	f = 1.195 df1 = 2.0 p = 0.313 df2 = 42.0
Affective Involvement	56	52	60	f = 1.234 df1 = 2.0 p = 0.302 df2 = 42.0
Control	56	54	59	f = 0.855 df1 = 2.0 p = 0.433 df2 = 42.0
Values and Norms	57	54	60	f = 1.203 df1 = 2.0 p = 0.311 df2 = 42.0
Social Desirability	48	50	50	f =0.131 df1 = 2.0 p = 0.878 df2 = 42.0

No Two Groups are Significantly Different at the 0.050 Level Using Scheffe Procedure

The results of the Internalizing families are shown in Table 15. There was no significant difference between the Father, Mother and Adolescent groups in any of the FAM subscales.

The results of the Externalizing families are shown in Table 16. The results indicated that the family members in this family type had different perception of the family functioning situation. Using the Scheffe procedure, the Adolescent group had a higher scores than the Mother group in Control and Values and Norms.

Differences within the family groups, although not all statistically significant,

indicated a trend that the adolescents tend to obtained higher scores than their parents across the Clinical and Non-Clinical family groups.

Table 16. One-Way Analysis of Variance & Scheffe's Comparison of Externalizing Families' FAM Score of Father, Mother, and Adolescent

	Mean Subscale Score of FAM				
	Father	Mother	Adolescent	Analysis of Variance	
Task Accomplishment	63	61	70	f = 2.370 df1 = 2.0	p = 0.106 df2 = 42.0
Role Performance	59	65	65	f = 1.847 df1 = 2.0	p = 0.170 df2 = 42.0
Communication	61	59	66	f = 1.967 df1 = 2.0	p = 0.153 df2 = 42.0
Affective Expression	59	57	64	f = 2.226 df1 = 2.0	p = 0.121 df2 = 42.0
Affective Involvement	66	65	73	f = 1.403 df1 = 2.0	p = 0.257 df2 = 42.0
Control	62	59*	68*	f = 3.769 df1 = 2.0	p = 0.031 df2 = 42.0
Values and Norms	61	60*	70*	f = 4.226 df1 = 2.0	p = 0.021 df2 = 42.0
Social Desirability	42	44	41	f = 0.424 df1 = 2.0	p = 0.657 df2 = 42.0

(*) Denotes Significant Differences at the 0.050 Level Using Scheffe Procedure

VI. DISCUSSION

Hypothesis One

There are significant differences in family functioning characteristics between Externalizing families, Internalizing families, and Non-Clinical families as measured by FAM.

The results of the Multivarate Profile Analysis show that there were significant Family Assessment Measure profile differences between Internalizing, Externalizing and Non-Clinical families. The profile of the Externalizing families deviated most from the Non-Clinical families while the Internalizing families' profile fell between the two.

While the Multivariate Profile Analysis results showed significant difference between Non-Clinical, Internalizing and Externalizing Families, the results did not specify the nature of these differences. To investigate further, then, the profile analysis was conducted, comparing the Internalizing and Externalizing families.

Comparing only the profiles of Internalizing and Externalizing groups showed some degree of differences, but they were not statistically significant. Discrepencies between the two and three groups comparison may be due to several reasons. One reason is that the change of group size has affected the result of the statistical application. Another may be that the Internalizing and Externalizing familes were not two different groups. The adolescents' means of the Behavior problem Score and Social Competence Score from the Child Behavior Checklist and the Children Depression Inventory Score were not significantly different . From the raw data (see

Appendix I), extremly high scores were found among various individual subjects in both groups, the only difference being that the Extenalizing group had more subjects with higher scores. The large within-group variability is particularly evident among the Internalizing adolescents on the FAM's Task Accomplishment, Affective Involvement and Value and Norms subscales in which relatively wide range of Standard Deviation was found (see Table 1).

Non-significant results between the two Clinical groups have also been found in other studies. Lewis et al (1976) compared the family functioning of healthy families with families where one of the children was diagnosed as neurotic, behaviorally disordered, or psychotic. The results showed that the total scores of the healthy families and families with children who were diagnosed as psychotic were at the two extremes of the continuum, whereas the families with children who were described as behaviorally disordered and neurotic were in between, with the behaviorally disordered exhibiting a slightly more pathological score. However, the differences between the behaviorally disordered and the neurotic families were not statistically significant.

Using the Multi-Variance Analysis to study the differences of family environments between mentally ill and delinquent adolescents, Himes-Chapman and Hansen (1983) found significant differences between the two Clinical groups and the Non-Clinical families, but not between the two Clinical groups. The results from this study are confounded because Himes-Chapman and Hansen(1983) used the subject placements as a differentiation of psychopathology types instead of an objective

assessment measure. Individual placement does not necessarily reflect the individual nature of problems.

While the result of Multivariate Profile Analysis was not statistically different, attention should be given to the meaning that these scores represent. All of the subscales' scores of the Externalizing family groups, except the Social Desiribility, were in the dysfunctional range, whereas the Non-clinical and Internalizing families groups were in the normative range.

Since the Multivariate Profile Analysis had to consider all eight FAM subscales at the same time, it was a much more conservative test and more likely to accept the null hypothesis. To further examine differences between Internalizing families, Externalizing families, and Non-Clinical families on each FAM subscale, a less conservative univariate analysis, Scheffe's Test for Multiple Comparisons, was used. The findings futher indicated that the Externalizing family was a more dysfunctional family. The Externalizing family groups showed higher scores in all subscales than the Non-Clinical groups except the Social Desirability Scale, and all their subscales scores were within the dysfunctional range.

Following the interpretation guide of the FAM provided by Skinner et al (1978), the Externalizing families' FAM subscale scores suggest that these families might have failed to perform some basic tasks and might be unable to respond appropriately to changes in the family life cycle. These families exhibited inadequate problem solving methods, therefore minor stresses precipitate a crisis.

According to the interpretation guide, the Externalizing family might have a lack of

understanding and agreement among family members regarding role definition and ability to adapt new roles. There might be constant role conflicts because one or more members are overburdened by the family tasks. There might be a lack of mutual understanding and an inability for clear communication of feelings and information, and involvement among family members might be maladaptive. The patterns of influence and control would not allow the family to master the routine of ongoing family life in a consistent and generally accepted manner. This might result in continued role conflicts and lack of task accomplishment. Various components of the family's value system might be dissonent, resulting in confusion and tension. The degree of latitude might not be not appropriate. Although the description in the interpretation guide of the FAM is somewhat overgeneralized, it strongly suggests that the profiles of the Externalizing family group were similar to that of a dysfunctional family.

Himes-Chapman and Hansen (1983) and Patterson (1982) observed that families with acting out children are more disorganized. Himes-Chapman and Hansen (1983) found that parents of deliquent adolescents tended to set higher standards, but rejected their children at the same time as parents of mentally ill adolescents. Patterson (1982) found that the parents of anti-social children compared with parents of normal children tended to issue more commands, but seldom followed them through. There was a lack of parental supervision and leadership in the family. Patterson found that these parents on one hand tended to react in an irritable fashion to many minor events that other parents of normal children would ignore. On the other hand they tended to avoid major issues that affected the child and the family. Patterson

points out that these parents were inept in punishing and giving positive reinforcement contingent to the child's behavior, and had poor problem solving skills. These families were therefore constantly in crisis.

From the FAM results, the Internalizing family groups perceived themselves as functioning in a relatively normal range. None of their subscales score means were in the dysfunctional range. Skinner, Steinhauer, Santa-Barbara (1983) found two discriminant functions in the Family Assessment Measure. The first dimension differentiates the child population from the adult population, and the second dimension discriminates the problematic from the non-problematic families. This dimension is bipolar, with the positive pole marked by problems in the areas of Role Performance and Affective Involvement and the negative pole characterized by the response style scales, the Social Desirability.

According to their research finding, Skinner et al (1983) suggest that, in general, problem families, are more likely to report family dysfunction in Role Performance and Affective Involvement. Differences between Externalizing and Non-Clinical families were found in all subscales except Role Performance among the Father groups. These differences were also found between the Externalizing and Internalizing groups among the mothers and the adolescents in both Role Performance and Affective Involvement subscales and latter subscale among the fathers, but such differences were not found between the Internalizing and the Non-Clinical families.

Hypothesis Two

Different degrees of differences in FAM results between family members

are expected between Non-Clinical families, Internalizing families, and Externalizing families.

The results of the Multivariate Profile Analysis partially supported Hypothesis Two. They showed that there were significant differences between Adolescent, Father and Mother groups among the Non-Clinical families and no differences in the Internalizing and Externalizing families respectively. Differences between family members in their perception of the family situation were expected because the adolescent period is a time for teenagers to try on new beliefs and identities which might contradict the family's traditions. Functional families are not free from conflicting perceptions and view points between members, but they are flexible enough to accomodate differences and generate changes. In contrast, dysfunctional families tend to respond to conflicts and disagreements in a stereotypic and repetitive interaction pattern (Minuchin, 1976; Beavers,1977; Hensen and L'Abate, 1982).

In his research of non-problem families, Olsen (l983) found more disagreements among family members in their perception of the family situation during the adolescent stage than any other stage of the family life cycle. As a group and regardless of sex differences, adolescents tend to view their families as more extreme and less balanced. In the present study, the adolescents as a group also reported higher scores in all sub-scales of the Family Assessment Measure than their parents. However, only the Non-Clinical families showed statistically significant differences in the overall profile. When compared with each individual subscale, using the Scheffes' comparision, the results showed that the Adolescent group of Non-Clinical families

perceived that the family was functioning less effectivly in the Control than the Mother group and in the Value and Norm dimension than the Father group. Whereas the Adolescent group of the Externalizing families, showed differences in the same two dimensions but with both parent groups. No significant differences were found between the Internalizing family members.

The results of the FAM were more than just descriptions of the family situation of the Non-Clinical, Internalizing and Externalizing Families. They were reflections of different perceptions of these families concerning the outside world. The task of filling out the Family Assessment Measure was also a disclosure of the family to outsiders. In light of the range of subscale scores, the insignificant results from the profile analysis may carry different meanings for the Internalizing and Externalizing families.

Oliveri and Reiss (1982) made an observation in testing family problem solving styles in a laboratory setting. They found that the experiential task itself became a challenge to the family's worldview. The response of the family to the assigned task depended on the family's perception of the situation. In a classic study conducted by Reiss (1979), he observed that families with adolescents diagnosed as schizophrenic viewed the laboratory as dangerous and a threat to the intense family ties. These families tended to stick together even though it was at the expense of effective problem solving. Reiss calls this type of problem-solving behavior as "consensus-sensitive". The families with deliquent youth perceived the situation as a chance for each individual to demonstrate their independence from the other, and therefore were more sensitive to the outside information. This is the "interpersonal-distance sensitive"

problem-solving style. The "normal" families perceived the experiment as an opportunity for the family to explore and master a challenge together. The members were able to utilize information both from within and without the family unit. This is the "environment-sensitive" style.

It could be argued that the FAM result might be an indication of the family's world view orientation and coping styles of these families. Members of the Externalizing families might not be afraid of the outside world. They were therefore least inhibited in expressing their perception of the family and more readily to acknowledge that there were family problems and described the situation as it was. As a result they had more extreme profiles in their FAM results. On the other hand, members of the Internalizing families might have perceived the outside world as a threat. They therefore projected a "pseudo-tranquility" family image and denied the existence of disruption and pain to avoid unnecessary outside intrusion. Despite the existence of a severe problem adolescent in the family, the overall Family Assessment scores obtained by them were within the normal range.

This interpretation is further supported by results derived from a less conservative univariate statistical analysis which will be more likely to reject the null hypothsis than the multivariate method. Differences between subscales were found among the Externalizing and Non-Clinical families but not in the Internalizing families.

It could also be argured that the research findings may be a reflection of differences in the family interaction style in which the Internalizing and Externalizing families resembled that of Centripetal and Centrifugal family interaction and coping

styles (Beaver, 1977, 1981; Stierlin and Ravenscoft 1972; Stierlin l985). Beavers (1977, l98l) identified general characteristics between the centripetal and centrifugal family types. The centripetal family is inner-oriented. The family members have high emotional investment within the family and therefore, it is difficult for them to achieve autonomy. The prevalent values and norms in the family are that the family itself is the most trustworthy source of satisfaction. The family tends to project a more positive image and denies the existence of trouble and pain. They try to avoid direct confrontations which might threaten the unity of the family. Expression of negative feelings and anger tend to be covert. The primary emotional task is to maintain the harmony and the cohesiveness of the family. Beavers points out that with the rigid structure, the family is able to maintain superfical role definitions and patterns of relationships. There is a clear parent/child hierarchy. Parental control over the children's behavior is effective. Parents inhibit children's aggressive efforts at independence but reinforce dependent, even clinging behavior. Children from these families often have strong attachments with the family, but poor independent outside contacts. This type of family may appear to be stable but in reality is filled with hidden emotional undercurrents.

Beavers describes the centrifugal family as one that has an outer orientation. He suggeststhat family of this type encourages separate and independent styles of living. Personal satisfaction and fulfillment are expected more from the external environment rather than from within the family. The interfamily loyalty is weak, therefore, this group tends to have more visible difficulties. Anger and conflict are overt which encourages

direct confrontation and acting-out behavior. The parental coalition is unstable with open conflicts and confrontations. Parental control over children is inconsistent and ineffective. The child's independence and aggressive behavior is reinforced as a means of problem solving while attachment behavior is ignored. The dependency link between parents and the children is weak. Children tend to leave home much earlier than the norm.

Beavers argues that different family interaction types will foster different types of problems among the children of these families. He asserts that the natural consequence of the centripetal family is to produce individuals who are inhibited in their emotional and behavioral expressions, with a rigid self-imposed moral standard and who are over-sensitive to emotional pain. Therefore, offspring from this family type experience neurotic types of problems more often. Because the centrifugal family environment encourages individualistic need fulfilment of its members, its offspring tend to be impulsive and aggressive in their interpersonal relationships and are more likely to be subject to acting out types of behavioral problems.

Beavers suggests that, depending on the level of family functioning, the centrifugal type is associated with behavior disorder, borderline personality disorder, and sociopath. The centripetal type is associated with neurotic, severe obsessive and schizophrenia in the offspring in these families. This grouping of individual psychopathology types corresponds to the Achenbach and Edelbrock's (1978) dichotomy of child psychopatholgy types, the Externalizing and the Internalizing behavior problems.

The findings of the present study indirectly support Reiss' and Beaver's assertion. The FAM result, however, did not provide any direct assessment of family interaction and coping styles nor any measures of these families' world view. More research is needed.

VII. CONCLUSION

Limitations

The limitations of this study are due mainly to the research methodology and the nature of the research data.

The family relationship is a dynamic, multi-variable one. Changes in the interaction between family members are subtle. They often happen simultaneously and reciprocally and can only be identified through careful observation. Facing the complexity and the diversity of family relationships, as well as the need to develop a precise but simple operational definition and objective inventory, it is inevitable that researchers take a reductionistic perception of the family so that overall family functioning can be assessed. Considering the intricate nature of the familial relationship, the Family Assessment Measure appears to be rather overgeneralized and incomplete. Nonetheless, it provides an objective and structured assessment of the family. It is a useful tool in gaining a better understanding of the nature of family process.

The limitations of the measurement are further compounded by the relatively small and homogenous normative samples which make it difficult to demonstrate validity, reliabilty, and predictability for the inventory.

This problem is not found only in the Family Assessment Measure. Sigafoos, Reiss, Rich and Douglas (1985) compared their observational method, the Card Sort Procedure, with Olsen's self-report instrument, Faces II, which has a similar

conceptual framework. They found little predicted association based on conceptual similarity. Green, Kolevzon, and Vosler (l985) compared Faces II and the Beavers-Timberlawn Family Evaluation Scales on the same theoretical dimension. They, too, found little association between these two measures.

A second limitation for this study is a result of the historical nature of the data base and the relatively small sample size. Because the data were obtained from past client files, additional measurements to identify the family functional style and other variables was not possible.

The relatively small sample size restricts the number of variables that can be considered in the analysis, thus, the effect of other factors such as behavior problem profile type, socio-economic status and the sex of the population could not be examined in this study.

Implications

The results of the present study support the assertion that there are complex interrelationships between family functioning dynamics and individual psychopathology. Minuchin (1974) suggests that idividual's intra-psychic life is not entirely an internal process. Individuals influence their social evironment and are influenced by it in a constantly recurring sequences of interaction. The site of psychopathology is therefore in the feedback between individuals and their social enviroment. With this assumption, Minuchin argues that since context affects inner processes, and changes in context produce changes in the individual behavior, the therapeutic focus should not be solely on the individual but the interrelationship

between inidividual and the imediate social context.

The family is the most immedidate and important social environment. As family members, individuals must adopt to the characteristics of the family system. Individuals respond to as well as contribute to stresses in the family. Thus certain types of family charateristics are closely related to the development and the maintenance of individual family member's psychopathology, and individual psychopatholgy in turn plays an important role in maintaining the balance in the family system. To change the individual's behavior, the family system needs to be intervened.

While the research findings in the present study show interrelationship between family functioning characteristics and individual psychopathology, the results do not provide clear information on the meanings of the FAM scores. There are at least three possible explanations for the appearance of different ranges of the FAM scores between the Non-Clinical, Internalizing and Externalizing family groups. First of all, the FAM scores may be a reflection of the existing family functioning situation. According to the FAM subscale scores, the Externalizing families were the most chaotic. The FAM profile showed that these families were dysfunctional in all dimensions of family functioning. In contrast, the Internalizing families were similar to the Non-Clinical families who were within the functional range.

Secondly, the FAM results may be an indication of how these families perceive the outside world. The Externalizing families might not feel threatened by the outside world, and therefore the individuals were more likely to express their true perception of the family to the outsiders. Members of the Internalizing families might be more fearful

of the outside world and therefore presented a more positive image of their family.

Thirdly, the FAM results may be a reflection of differences in family interaction and coping styles. The Externalizing families might have an interaction style similar to the Centrifugal type. With weak family loyalty and feelings of abandonment, individuals might be more likely to disclose their feelings about their family openly. The Internalizing families might have an interaction style similar to the Centripetal type in which the family encouraged dependency and attachment. Individuals might feel guilty and responsible for the family situation. Family members might be more inhibited in revealing their feelings, for fear of betraying their family.

If there is some validity in the latter two explanations, the results of a self-report family assessment device may be more than just a measurement of the family functioning level. They might also be a reflection of the family's world view and coping style. A family that appears to be calm and stable is not necessarily less troubled. Nor does a family that shows open disagreements and conflicts have to be more dysfunctional. Other family variables must be considered in the process of defining family health or pathology.

The latter two explanations also have implication for treatment planning in the Externalizing and Internalizing families. Being similar to the centrifugal family type, the Externalizing family may have difficulties in maintaining the family link. The intervention focus should therefore be in repairing the emotional cutoff in the disengaged family system. The family ties need to be reestablished and strengthened. Being similar to the centripetal family type, the Internalizing family may have problems in allowing its

family members the necessary automony in developing individual identity. The intervention should, therefore, help the family achieve differentiation. The enmeshed family system should be restructured so that clear and flexible individual and family subsystem boundaries can be formed.

Caution should be taken , however, when making generalizations about the findings in the present research. Although the findings indicated the interrelationship between level of family functioning, family worldview, family interaction and coping style, and individual psychopathology, it is only by indirect inference. More research is needed to clarify the interplay among these variables.

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APPENDIX I: INDIVIDUAL DATA OF INTERNALIZING, EXTERNALIZING AND NON-CLINICAL FAMILIES

ABBREVIATON KEY

Personal Data

Family Position (Fam Pos): Father = 1, Mother = 2, Adolescent = 3

Sex: Female = F, Male = M

Parents' Job Types (Job):

- Senior Management = 1
- Middle Management =2
- Clerical or Sales = 3
- Skilled Tradesperson = 4
- Non-Skilled or Semi-Skilled Labor = 5
- Homemaker = 6

Test Data

Child Behavior Checklist (CBC): Behavior Problem Score (BPS)
Social Competence Score (SCS)

Profile Type (Pfl):

Females:
Internalizing Types:
- Anxious-Obsessive = AnOb
- Somatic Complaints =SomC
- Anxious-Obsessive-Aggressive = AOAg

Externalizing Types:
- Delinquent = Del
- Aggressive-Cruel = AgCr
- Depressed-Withdrawal-Delinquent = DWD

Males:
Internalizing Types:
- Schizoid = Sch
- Uncommunicative = UnCm

Externalizing Types:
- Immature-Aggressive = ImAg
- Hyperactive = Hyp
- Delinquent = Del
- Uncommunicative-Delinquent = UcDl

Children's Depression Inventory (CDI)

Family Assessment Measure (FAM) Subscales:

- Task Accomplishment = TA
- Communication = Com
- Affective Involvement = AFI
- Values and Norms = V&N
- Role Performance = RP
- Affective Expression = AFE
- Control= Ctrl
- Social Desirability = SDs

(*) and/or (**) denotes categories which are not applicable to the subject
(-) denotes missing data

1. Individual Data of Internalizing Families

					CHILD BEHAV. CHECKLIST				FAMILY ASSESSMENT MEASURE							
ID No.	FAM POS	AGE	SEX	JOB	BPS	SCS	Pfl	CDI	TA	RP	Com	AFE	AFI	Ctr	V&N	SDs
1102	1	-	M	3	**	**	**	**	68	67	58	63	65	64	65	40
	2	-	F	6	**	**	**	**	55	62	58	58	54	52	57	47
	3	-	F	*	85	28	SCom	04	50	52	56	58	54	56	54	47
1103	1	-	M	2	**	**	**	**	68	68	65	55	65	68	55	28
	2	-	F	6	**	**	**	**	56	55	48	45	57	54	52	50
	3	12	M	*	70	53	Sch	03	68	60	67	62	65	70	72	45
1107	1	-	M	5	**	**	**	**	39	47	48	42	43	46	43	42
	2	-	F	5	**	**	**	**	41	50	52	48	43	50	50	48
	3	16	M	*	77	33	UnCm	02	45	43	47	42	41	60	39	45
1204	1	-	M	4	**	**	**	**	78	77	70	72	72	76	68	40
	2	-	F	4	**	**	**	**	70	78	64	52	68	64	66	77
	3	13	F	*	74	-	AOAg	48	102	87	81	73	83	90	97	27
1208	1	-	M	5	**	**	**	**	45	42	48	55	50	46	50	50
	2	-	F	6	**	**	**	**	53	48	54	47	45	52	55	43
	3	14	M	*	68	40	Sch	20	62	58	56	55	70	60	72	55
1404	1	-	M	5	**	**	**	**	44	37	44	40	43	44	41	63
	2	-	F	6	**	**	**	**	45	43	48	43	45	46	41	57
	3	15	F	*	63	44	AnOb	12	38	37	42	37	43	38	37	62
8005	1	47	M	-	**	**	**	**	56	53	52	60	48	58	54	48
	2	45	F	2	**	**	**	**	58	50	53	52	46	56	53	50
	3	15	F	*	63	37	AnOb	22	62	57	62	60	46	58	57	57

					CHILD BEHAV. CHECKLIST				FAMILY ASSESSMENT MEASURE							
ID NO.	FAM POS	AGE	SEX	JOB	BPS	SCS	Pfl	CD	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
6006	1	-	M	5	**	**	**	**	50	32	59	60	59	40	59	43
	2	52	F	6	**	**	**	**	42	38	52	50	43	46	45	50
	3	14	F	*	75	44	AOAg	26	76	58	82	85	68	74	79	37
8008	1	31	M	5	**	**	**	**	56	45	45	55	46	60	57	32
	2	42	F	5	**	**	**	**	72	67	64	72	66	68	66	43
	3	13	M	*	67	40	Sch	21	78	55	75	75	75	58	72	42
4016	1	41	M	5	**	**	**	**	65	60	65	73	68	66	66	42
	2	41	F	6	**	**	**	**	55	48	56	53	45	58	48	50
	3	16	M	*	79	-	UnCm	02	32	35	47	43	41	36	39	67
5001	1	39	M	-	**	**	**	**	53	53	55	52	63	58	61	53
	2	39	F	-	**	**	**	**	53	65	48	52	52	42	55	50
	3	14	M	*	66	40	Sch	09	44	40	45	45	39	48	49	57
5005	1	41	M	3	**	**	**	**	44	43	52	42	37	42	50	58
	2	34	F	5	**	**	**	**	52	47	56	53	48	52	57	57
	3	14	F	*	67	35	SomC	39	61	53	65	65	50	64	59	55
2004	1	37	M	2	**	**	**	**	67	60	61	48	45	50	63	85
	2	-	F	6	**	**	**	**	52	50	65	57	70	58	55	58
	3	13	F	*	81	30	AOAg	24	56	57	64	63	68	68	55	45
5019	1	35	M	4	**	**	**	**	65	58	65	63	66	64	61	43
	2	34	F	4	**	**	**	**	64	70	61	68	54	58	55	45
	3	13	F	*	74	34	AOAg	24	62	50	61	72	79	62	55	45
5018	1	37	M	5	**	**	**	**	61	57	61	60	63	62	57	53
	2	33	F	6	**	**	**	**	42	43	48	58	46	50	48	58
	3	15	M	*	64	37	Sch	07	52	45	56	58	46	52	61	62

2. Individual Data of Externalizing Families

					CHILD BEHAV. CHECKLIST				FAMILY ASSESSMENT MEASURE							
ID No.	FAM POS	AGE	SEX	JOB	BPS	SCS	Pfl	CDI	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
1209	1	-	M	2	**	**	**	**	70	60	55	45	59	56	55	35
	2	-	F	5	**	**	**	**	79	70	65	65	75	72	75	42
	3	13	M	*	76	33	ImAg	13	65	73	73	52	65	64	68	55
1406	1	-	M	2	**	**	**	**	58	57	58	57	63	60	59	47
	2	-	F	3	**	**	**	**	47	58	53	52	55	48	57	53
	3	14	M	*	67	40	Hyp	14	58	50	59	57	66	64	59	48
1407	1	-	M	5	**	**	**	**	75	67	81	77	61	68	61	28
	2	-	F	4	**	**	**	**	65	68	73	63	74	50	66	48
	3	13	M	*	71	33	ImAg	18	64	60	59	58	46	56	59	55
1502	1	-	M	2	**	**	**	**	42	47	48	43	45	46	43	55
	2	-	F	3	**	**	**	**	41	45	45	42	41	36	35	53
	3	12	F	*	74	38	AgCr	24	73	65	58	57	75	72	68	37
1611	1	-	M	5	**	**	**	**	55	52	50	55	54	54	54	50
	2	-	F	3	**	**	**	**	52	57	42	43	41	46	45	45
	3	14	F	*	74	31	AgCr	17	67	63	70	70	77	76	77	42
2001	1	39	M	4	**	**	**	**	64	70	53	53	65	64	65	47
	2	40	F	4	**	**	**	**	81	78	58	57	75	68	72	28
	3	14	F	*	73	-	DWD	11	59	60	39	45	54	48	59	55
9007	1	41	M	5	**	**	**	**	72	67	62	60	75	70	70	42
	2	37	F	3	**	**	**	**	64	72	70	60	57	72	63	45
	3	14	F	*	71	-	DWD	28	70	68	75	73	86	80	79	33

					CHILD BEHAV. CHECKLIST				FAMILY ASSESSMENT MEASURE							
ID No.	FAM POS	AGE	SEX	JOB	BPS	SCS	Pfl	CDI	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
6004	1	49	M	5	**	**	**	**	56	53	53	52	61	66	59	42
	2	47	F	6	**	**	**	**	56	55	55	47	59	56	54	47
	3	13	M	*	71	38	Del	05	62	58	62	60	75	68	72	48
4011	1	-	M	5	**	**	**	**	67	60	68	55	101	62	61	47
	2	-	F	5	**	**	**	**	73	65	72	67	74	68	61	42
	3	14	F	*	79	37	AgCr	17	56	63	64	60	72	64	72	43
4007	1	48	M	5	**	**	**	**	39	28	48	58	61	46	45	38
	2	49	F	5	**	**	**	**	62	62	61	60	77	62	72	43
	3	13	M	*	69	38	UCDI	15	56	55	64	58	68	66	57	35
4503	1	48	M	4	**	**	**	**	75	68	65	50	66	70	72	38
	2	-	F	4	**	**	**	**	55	65	45	48	43	64	46	55
	3	12	M	*	65	40	Del	10	82	63	73	78	70	74	81	40
5014	1	52	M	3	**	**	**	**	56	53	62	55	63	62	61	42
	2	54	F	6	**	**	**	**	56	78	61	55	68	56	66	42
	3	13	F	*	75	31	AgCr	28	78	90	76	65	95	76	86	35
5016	1	54	M	3	**	**	**	**	70	62	72	72	74	64	72	42
	2	52	F	3	**	**	**	**	55	57	59	55	61	50	61	48
	3	13	F	*	75	44	AgCr	03	93	72	73	75	86	74	68	28
2202	1	-	M	4	**	**	**	**	76	73	79	82	79	72	72	28
	2	-	F	-	**	**	**	**	58	73	64	57	88	70	65	33
	3	14	F	*	89	26	AgCr	07	96	75	85	77	94	80	88	28
5024	1	49	M	3	**	**	**	**	67	63	59	70	68	64	66	43
	2	50	F	6	**	**	**	**	68	70	67	67	86	68	68	33
	3	16	F	*	74	33	DWD	11	67	57	67	73	65	62	59	37

3. Individual Data of Non-Clinical Families

					FAMILY ASSESSMENT MEASURE							
ID No.	FAM POS	AGE	SEX	JOB	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
3219	1	46	M	1	52	51	44	52	52	54	51	50
	2	37	F	6	54	59	49	53	55	57	54	42
	3	14	F	*	52	53	49	51	63	53	56	44
3249	1	45	M	4	63	65	66	56	68	54	43	35
	2	44	F	6	72	65	65	63	59	57	65	36
	3	15	F	*	59	56	57	51	50	60	56	55
1110	1	40	M	4	42	47	48	44	52	45	49	56
	2	33	F	3	37	48	38	46	40	38	44	59
	3	13	F	*	41	45	48	48	46	47	50	56
5203	1	53	M	1	45	43	39	42	45	44	41	65
	2	50	F	6	47	47	48	48	52	53	46	59
	3	14	M	*	49	55	55	52	49	50	50	59
5854	1	50	M	1	55	57	47	52	60	57	57	44
	2	45	F	1	61	60	43	46	62	61	59	38
	3	16	M	*	74	71	60	51	63	66	60	36
8033	1	47	M	2	51	52	53	57	56	50	53	42
	2	49	F	6	46	47	51	51	36	44	41	56
	3	16	F	*	46	48	40	48	40	44	51	49
8028	1	55	M	2	48	47	47	52	53	53	49	54
	2	48	F	6	38	52	34	39	37	41	41	63
	3	15	F	*	40	44	39	44	37	45	38	60

					FAMILY ASSESSMENT MEASURE							
ID NO.	FAM POS	AGE	SEX	JOB	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
4741	1	44	M	1	50	44	47	48	46	45	49	59
	2	36	F	1	43	48	43	38	50	50	49	60
	3	13	F	*	64	52	64	67	45	53	61	33
1089	1	56	M	1	43	57	46	53	50	54	48	51
	2	52	F	4	50	55	49	49	56	50	57	42
	3	15	F	*	62	56	61	62	62	67	65	44
1074	1	40	M	1	51	63	65	60	55	51	54	53
	2	39	F	3	59	56	59	57	52	54	54	50
	3	13	M	*	64	59	55	73	52	60	65	50
1070	1	52	M	1	46	44	44	41	39	41	44	56
	2	47	F	6	52	51	49	46	52	56	51	51
	3	14	F	*	45	41	46	52	43	51	45	56
1024	1	55	M	4	54	84	73	66	59	69	53	36
	2	43	F	5	58	64	70	57	66	56	60	38
	3	16	F	*	76	68	70	70	65	60	64	29
9866	1	49	M	1	52	53	53	56	59	57	56	44
	2	43	F	6	64	59	62	64	66	58	59	42
	3	16	M	*	56	53	52	51	59	51	54	54
9976	1	40	M	-	45	49	46	39	42	44	46	56
	2	37	F	1	47	53	46	41	49	42	48	48
	3	14	M	*	53	52	49	56	47	51	55	51
9936	1	47	M	5	50	44	51	46	47	48	44	57
	2	42	F	5	46	49	46	45	46	45	50	62
	3	13	F	*	52	47	56	51	55	53	54	45

					FAMILY ASSESSMENT MEASURE							
ID NO.	FAM POS	AGE	SEX	JOB	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
9956	1	36	M	1	45	44	38	41	42	41	46	66
	2	33	F	3	38	35	36	38	36	41	41	65
	3	14	M	*	38	49	36	42	40	36	38	63
1057	1	46	M	1	54	57	51	51	42	53	54	53
	2	43	F	6	39	44	43	37	37	38	39	57
	3	14	M	*	52	52	56	52	53	51	53	56
1040	1	54	M	1	52	40	43	46	46	56	43	60
	2	46	F	6	41	48	44	48	40	41	44	50
	3	15	F	*	52	45	42	46	45	54	48	53
1045	1	37	M	1	54	49	52	55	53	53	55	50
	2	33	F	6	52	51	52	53	56	53	51	45
	3	13	F	*	43	51	40	42	40	48	48	57
1051	1	40	M	2	42	43	40	42	39	41	39	62
	2	39	F	3	40	39	42	37	39	44	45	63
	3	15	M	*	41	37	43	42	37	41	41	61
1061	1	45	M	1	48	52	51	57	52	51	53	53
	2	42	F	6	50	59	53	52	52	51	51	47
	3	16	M	*	56	59	55	56	57	60	60	51
1065	1	46	M	1	52	49	57	55	57	57	54	44
	2	42	F	1	53	49	42	46	44	41	46	42
	3	13	M	*	54	51	43	55	49	50	50	54
1070	1	50	M	2	45	51	52	58	47	48	41	43
	2	39	F	6	52	52	49	53	53	48	45	47
	3	14	F	*	52	40	55	49	46	56	56	56

					FAMILY ASSESSMENT MEASURE							
ID NO.	FAM POS	AGE	SEX	JOB	TA	RP	Com	AFE	AFI	Ctrl	V&N	SDs
3638	1	40	M	4	50	51	48	51	49	53	51	59
	2	39	F	3	49	51	46	49	40	47	48	56
	3	13	F	*	54	57	53	60	50	54	55	48
3661	1	46	M	1	40	52	43	38	46	44	46	56
	2	41	F	1	35	37	36	35	35	41	39	72
	3	15	M	*	43	45	38	39	42	53	46	62
1102	1	63	M	5	49	49	49	48	42	47	40	56
	2	57	F	6	52	48	53	52	45	50	43	54
	3	16	M	*	56	51	60	56	42	53	44	56
4702	1	46	M	2	44	52	46	49	40	41	46	51
	2	40	F	2	47	53	43	51	40	39	46	50
	3	16	F	*	52	51	49	55	43	47	43	47
3414	1	-	M	2	37	37	39	31	37	43	36	66
	2	46	F	3	45	47	42	45	50	48	44	54
	3	13	F	*	52	51	42	44	40	47	56	63
3636	1	44	M	2	43	40	44	42	42	41	40	51
	2	41	F	6	39	47	42	34	39	38	41	54
	3	15	M	*	44	47	46	48	49	45	49	51
3501	1	46	M	1	59	56	65	60	60	56	60	44
	2	-	F	1	45	52	53	53	47	47	43	50
	3	16	M	*	69	60	69	59	79	60	74	33